

DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SIMPSON COUNTY

TENNESSEE STATE LINE - FRANKLIN ROAD

KY. 383 OVER RED RIVER

UPDATE DATE
LETTING DATE 01/20/97

PLANS PREPARED BY
JR KING
DESIGN SECTION

REFERENCES AND ESTIMATE OF QUANTITIES														
ITEM	SHEET NO.	CONCRETE CU Yds. CLASS A CLASS AA	REINFORCEMENT Lbs.	EPOXY COATED STEEL REINFORCEMENT Lbs.	STRUCTURAL STEEL Tons	CYCLOPENNY STONE SLOPE PROTECTION Tons	STRUCTURE EXCAVATION CU Yds. Common Surface	TYPE II PRESTRESSED I-BEAMS Lbs. FT.	END BEAM BACKFILL Lbs. FT.	EXPANSION DAM 2' NEEDLE Lbs. FT.	STEEL FILES HP 12 x 33 Lbs. FT.	TEET FILES Lbs. FT.		
TITLE SHEET	1													
GENERAL NOTE	263													
LAYOUT	4													
Surveillance	5													
SUBSTRUCTURE														
END BEAM 1	647	393	265	5914				335				280	20	
Pile 1	8	642		9912					165	10				
Pile 2	9	674		10571					190	20				
END BEAM 2	10611	393	265	9861				305				322	23	
Pile Layout	12													
Substructure Total	—	2102	490	32296				720	355	30		602	43	
SUPERSTRUCTURE														
Superstructure Total	13,144.15		2416	21108	30,859				748.0			70		
Beam Details	15													
Flangeless Beam	16													
Commoner Element	176.18													
Superstructure Total	—	2416	21108	30,859	30,859	1 Lump Sum	720	355	30	748.8	2 Lump Sum	70	602	43
Keystone Totals	—	2102	2906	33,360	30,859				748.8					

¹ APPROXIMATE WEIGHT OF STRUCTURAL STEEL IS 1937 LBS

² LUMP SUM Bid FOR END BEAM BACKFILL CONSISTS OF APPROXIMATELY 170 CU. YDS. OF STRUCTURES

EXCAVATION, END BEAM AND 250 CU. YDS. OF END BEAM BACKFILL MATERIAL.

REFERENCES

REFERENCES LISTED BELOW ARE THE CURRENT EDITION AND ARE TO BE USED WITH THESE PLANS.

SPECIAL PROVISION 19(76) EPOXY COATED STEEL REINFORCEMENT

STANDARD DRAWINGS
BBP-001-04, BGB-001-03, BGB-002-03, BGB-003-03, B4X-006-01, BPS-003-01,
BUE-001-03, RBC-001-02

BILL OF INCIDENTAL MATERIAL		
ITEM	No.	SIZE
Plastic Pipe	16	10' x 1' 11" Long (End Bent Wires)
Plastered Coats	6	10' x 5' x 6' @ Pier Cap
	7	10' x 4' x 6' @ Pier Cap

KY 383 OVER RED RIVER		SHEET 1 OF 10
COMMONWEALTH OF KENTUCKY BUREAU OF HIGHWAYS		
FRANKFORT COUNTY OF		
SIMPSON TENNESSEE STATE LINE - FRANKLIN ROAD		
STATION 21+99	P. E. PROJECT NO. BRS 5070 (1)	BRIDGE PROJECT NO. BRS 5070 (1)
CONSTRUCTION PROJECT NO. BRS 5070 (1)	MAINTENANCE PROJECT NO. BRS 5070 (1)	19993

HIGH BRIDGE

GENERAL NOTE

SPECIFICATIONS

THE KENTUCKY BUREAU OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION SHALL APPLY TO THIS PROJECT.

DESIGN LOAD

THIS BRIDGE IS DESIGNED FOR HB2U-44 LIVE LOAD, AS SPECIFIED IN 1973 AASHTO SPECIFICATIONS. THIS BRIDGE IS DESIGNED FOR A WIND LOAD BASED ON A WIND VELOCITY OF 64 MPH.

DESIGN STRESSES (ULTIMATE STRENGTH DESIGN)

FOR REINFORCED CONCRETE USE THE FOLLOWING:

CLASS A: F'c = 3500 PSI
fy = 60,000 PSI

CLASS AA: F'c = 4000 PSI
fy = 60,000 PSI

FOR PRESTRESSED GIRDER CONCRETE:

FOR BEAMS IN SPANS 1 AND 3

Fs = 20,000 PSI

fc = 2,000 PSI

F's = 270,000 PSI FOR PRESTRESSING STRANDS

F'c = 5,000 PSI

u = 200 PSI FOR EMBEDMENT

n = 8

FOR BEAMS IN SPAN 2

Fs = 20,000 PSI

fc = 3,000 PSI

F's = 270,000 PSI FOR PRESTRESSING STRANDS

F'c = 6,000 PSI

u = 200 PSI FOR EMBEDMENT

n = 8

CONCRETE

CLASS "AA" CONCRETE IS TO BE USED IN THE ROADWAY SLAB, BARRIERS AND IN THE PORTIONS OF THE SUBSTRUCTURE ABOVE THE TOP OF THE CAPS EXCEPT IN THE PEDESTALS. CLASS "A" CONCRETE IS TO BE USED IN THE PEDESTALS AND IN THE SUBSTRUCTURE BELOW THE TOP OF THE CAPS. PRESTRESSED GIRDER CONCRETE SHALL BE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

PRESTRESSING REINFORCEMENT

PRESTRESSED REINFORCEMENT SHALL BE 1/2" NOMINAL DIAMETER UNCOATED SEVEN-WIRE STRESS-RELIEVED STRAND CONFORMING TO THE REQUIREMENTS OF GRADE 270, AASHTO DESIGNATION, M203, CURRENT EDITION.

TENSIONING METHOD

BEAMS SHALL BE PRETENSIONED.

TEMPORARY SUPPORTS

TEMPORARY SUPPORTS OR SHORING WILL NOT BE PERMITTED UNDER THE GIRDERS WHEN POURING THE CONCRETE FLOOR SLAB OR WHEN TAKING "TOP OF BEAM" ELEVATIONS.

CONSTRUCTION METHOD FOR BEAMS IN SPAN 2

NO BOND STRESS SHALL BE TRANSFERRED TO THE CONCRETE, NOR SHALL END ANCHORS BE RELEASED, UNTIL THE CONCRETE HAS ATTAINED A COMPRESSIVE STRENGTH AS SHOWN BY STANDARD CYLINDERS MADE AND CURED IDENTICALLY WITH THE GIRDERS, OF AT LEAST A MINIMUM STRENGTH OF 5000 PSI, CYLINDER STRENGTH SHALL BE 6000 PSI BEFORE BRIDGE IS OPEN TO TRAFFIC. AN INITIAL FORCE SHALL BE APPLIED TO EACH STRAND SUCH AS TO DEVELOP A STRESS OF 180,000 PSI. BEAMS WITH HONEYCOMB OF SUCH EXTENT AS TO EFFECT THE STRENGTH OR RESISTANCE TO DETERIORATION WILL NOT BE ACCEPTED. AN ALLOWANCE OF .0005L SHALL BE MADE FOR SHORTENING OF BEAMS DUE TO SHRINKAGE AND ELASTIC CHANGE.

CONSTRUCTION METHOD FOR BEAMS IN SPANS 1&3

NO BOND STRESS SHALL BE TRANSFERRED TO THE CONCRETE, NOR SHALL END ANCHORS BE RELEASED, UNTIL THE CONCRETE HAS ATTAINED A COMPRESSIVE STRENGTH AS SHOWN BY STANDARD CYLINDERS MADE AND CURED IDENTICALLY WITH THE GIRDERS, OF AT LEAST A MINIMUM STRENGTH OF 4,000 PSI, CYLINDER STRENGTH SHALL BE 5000 PSI BEFORE BRIDGE IS OPEN TO TRAFFIC. AN INITIAL FORCE SHALL BE APPLIED TO EACH STRAND SUCH AS TO DEVELOP A STRESS OF 180,000 PSI. BEAMS WITH HONEYCOMB OF SUCH EXTENT AS TO EFFECT THE STRENGTH OR RESISTANCE TO DETERIORATION WILL NOT BE ACCEPTED. AN ALLOWANCE OF .0005L SHALL BE MADE FOR SHORTENING OF BEAMS DUE TO SHRINKAGE AND ELASTIC CHANGE.

SUPERSTRUCTURE SLAB

THE SUPERSTRUCTURE SLAB SHALL BE POURED CONTINUOUSLY FROM OUT TO OUT BEFORE THE CONCRETE IS ALLOWED TO SET.

SHOP PLANS

SHOP PLANS SHALL BE IN ACCORDANCE WITH SUB-SECTION 605.05 PART A OF THE SPECIFICATION.

ELASTOMERIC BEARING PADS

ELASTOMERIC BEARING PADS SHALL MEET THE REQUIREMENTS OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, INCLUDING CURRENT INTERIM SPECIFICATIONS, EXCEPT AS MODIFIED ON STANDARD DRAWING BPB-001, CURRENT EDITION. THE COST OF THIS ITEM IS TO BE INCLUDED IN THE PRICE PER LINEAR FOOT FOR PRECAST PRESTRESSED CONCRETE BEAMS.

PAYMENT FOR PRECAST CONCRETE BEAMS

THE BASIS OF PAYMENT FOR THE PRESTRESSED CONCRETE BEAMS SHALL BE AT THE CONTRACT UNIT PRICE PER LINEAR FOOT OF BEAM, IN ACCORDANCE WITH THE SPECIFICATIONS.

WELDING

THE WELDING OF THE DOWELS IN THE END OF THE PRESTRESSED BEAMS TO THE ANGLES OVER THE PIERS AND WELD MATERIAL SHALL CONFORM TO THE "RECOMMENDED PRACTICES FOR WELDING REINFORCING STEEL", AMERICAN WELDING SOCIETY SPECIFICATIONS, CURRENT EDITION. NO DIRECT PAYMENT SHALL BE MADE FOR WELDING OR WELD MATERIAL, BUT THE COST OF THESE ITEMS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PRECAST PRESTRESSED CONCRETE BEAMS.

DEFORMED WIRE FABRIC

DEFORMED WIRE FABRIC MAY BE USED IN THE PRECAST BEAMS IN LIEU OF REINFORCING BARS, PROVIDED AN EQUIVALENT AREA OF STEEL IS FURNISHED. WIRE FABRIC IS TO BE DEFORMED WIRE MESH MADE OF COLD DRAWN WIRE CONFORMING TO ASTM SPECIFICATION A62, CURRENT EDITION.

FOUNDATION PRESSURE

FOOTINGS ARE DESIGNED FOR A MAXIMUM PRESSURE OF 13,000PSF. FILES ARE DESIGNED FOR A MAXIMUM AXIAL LOAD OF 30 TONS PER PILE AND A MAXIMUM HORIZONTAL SHEAR OF 2 TONS PER PILE.

TEXTURING

THE BRIDGE DECK SHALL BE TEXTURED IN ACCORDANCE WITH SECTION 609.13 OF THE STANDARD SPECIFICATIONS.

REINFORCEMENT

DIMENSIONS SHOWN FROM THE FACE OF CONCRETE TO BARS ARE CLEAR DISTANCES UNLESS OTHERWISE SHOWN. SPACING OF BARS IS FROM CENTER TO CENTER OF BARS.

EPOXY COATED REINFORCING STEEL

ALL REINFORCING BARS DESIGNATED BY SUFFIX (E) IN THE PLANS SHALL BE EPOXY COATED IN ACCORDANCE WITH SPECIAL PROVISION NO. 19K761 "EPOXY COATED STEEL-REINFORCEMENT".

BEVELED EDGES

ALL EXPOSED EDGES SHALL BE BEVELED 7/8" UNLESS OTHERWISE SHOWN.

BILL OF INCIDENTAL MATERIAL

THE QUANTITIES SHOWN IN THE BILL OF INCIDENTAL MATERIALS ARE APPROXIMATE ONLY AND THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING ENOUGH MATERIAL TO COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE COST OF THESE ITEMS IS TO BE INCLUDED IN THE UNIT PRICE BID FOR CLASS "AA" CONCRETE.

PAYMENT FOR STRUCTURAL STEEL

THE LUMP SUM BID FOR STRUCTURAL STEEL SHALL BE FULL PAYMENT FOR ALL STRUCTURAL STEEL, WELDING AND WELDING MATERIALS, FLOOR DRAINS, PAINT AND ALL LABOR AND MATERIALS NECESSARY TO ERECT THE STEEL IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE APPROXIMATE WEIGHT OF STRUCTURAL STEEL SHOWN IN THE ESTIMATE OF QUANTITIES DOES NOT INCLUDE OVERRUN OR WELD MATERIAL.

PILING

PILING SHALL BE DRIVEN TO REFUSAL OR TO SOLID ROCK.

TEST PILES SHALL BE DRIVEN WHERE DESIGNATED ON THE PLANS TO DETERMINE THE LENGTH OF FILE REQUIRED.

ALL TEST PILES SHALL BE ACCURATELY LOCATED SO THAT THEY MAY BE USED IN THE FINISHED STRUCTURE.

COFFERDAMS

COFFERDAMS OR SHEETING MAYBE REQUIRED FOR PIERS. FOR THE DESIGN OF COFFER-DAM, THE MINIMUM EARTH PRESSURE SHALL BE ASSUMED EQUIVALENT TO 34.4 POUNDS PER CUBIC FOOT FLUID PRESSURE. THE COST OF FURNISHING, PLACING, AND REMOVING COFFERDAM SHALL BE INCLUDED IN THE UNIT PRICE BID FOR STRUCTURE EXCAVATION COMMON.

PLAN ELEVATION FOR FOOTINGS

WHEN SUITABLE ROCK IS ENCOUNTERED AT A DATUM ELEVATION HIGHER THAN THE PLAN ELEVATION, THE HIGHER ELEVATION MAY BE UTILIZED FOR BEARING AS OUTLINED IN THE SPECIFICATIONS.

CONSTRUCTION IDENTIFICATION

THE NAMES OF THE PRIME CONTRACTOR AND THE SUB-CONTRACTOR SHALL BE IMPRINTED IN THE CONCRETE WITH ONE INCH LETTERS AT A LOCATION DESIGNATED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ALL PLANS, EQUIPMENT AND LABOR NECESSARY TO DO THE WORK FOR WHICH NO DIRECT PAYMENT WILL BE MADE.

MEMBRANE CURING COMPOUND

WHITE PIGMENTED CURING COMPOUND SHALL BE APPLIED TO THE BRIDGE DECK IN ACCORDANCE WITH SECTION 609.15 OF THE KHM SPECIFICATIONS.

SLOPE PROTECTION

SLOPE PROTECTION SHALL BE DRY CYCLOPEAN STONE SLOPE PROTECTION IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

KY. 303 OVER RED RIVER		SHEET 2
COMMONWEALTH OF KENTUCKY		
BUREAU OF HIGHWAYS		
FRANKFORT		
COUNTY OF		
SIMPSON		
TENNESSEE STATE LINE - FRANKLIN		
ROAD		
STATION 21+00.00	P.E. PROJECT NO.	
CONSTRUCTION PROJECT NO.	MAINTENANCE PROJECT NO.	19593

GENERAL NOTE



GENERAL NOTE

UPDATE DATE

LETTING DATE

PAIN

ALL STRUCTURAL STEEL SHALL BE CLEANED AND PAINTED IN ACCORDANCE WITH SECTION 607-25 OF THE K.B.H. SPECIFICATIONS.

DRAIN DETAILS

FOUNDRY NOTE - ALL DRAINS SHALL BE GRAY IRON CASTINGS, ASTM A48, CURRENT EDITION, CLASS 30A. REPORT OF FIELD INSPECTION OF CASTINGS, CURRENT FORM, SHALL BE SUBMITTED TO THE DIVISION OF MATERIALS.
THE DRAIN PIPE SHALL BE 6" Ø STANDARD WEIGHT IN ACCORDANCE WITH SUB-SECTION 810-02-15 OF THE SPECIFICATIONS.
PIPE, FITTINGS, AND CONNECTIONS SHALL BE INCLUDED IN THE LUMP SUM BID FOR STRUCTURAL STEEL, COMPLETE IN PLACE. PIPE AND ALL FITTINGS SHALL BE PAINTED IN ACCORDANCE WITH SECTION 607-25 OF THE K.B.H. SPECIFICATIONS.

END BENT BACKFILL

END BENT BACKFILL SHALL BE IN ACCORDANCE WITH STD. DWG. BGB-001 THRU BGB-003 CURRENT EDITION.

NEOPRENE EXPANSION DAM

THE CONTRACTOR SHALL USE ONE OF THE FOLLOWING OPTIONS:
A. TRANSFLEX 200A MANUFACTURED BY GENERAL TIRE AND RUBBER CO., WARASH, INDIANA.
B. WADOFLEX SR 2 MANUFACTURED BY WATSON BOWMAN ASSOCIATES INC., BUFFALO, N.Y.
THE EXPANSION JOINT SHALL BE FABRICATED TO THE CONTOUR OF THE ROADWAY
AND UP THE BARRIER CURBS TO AN ELEVATION AT LEAST 12" ABOVE THE FINISHED ROADWAY.

THE NEOPRENE EXPANSION DAM SHALL BE PAID FOR AT THE CONTRACT PRICE, PER LIN. FT,
AND SHALL INCLUDE ALL MATERIALS, TOOLS, EQUIPMENT, SUPPLIES, LABOR AND OTHER
INCIDENTALS NECESSARY TO THE SATISFACTORY COMPLETION OF MANUFACTURE AND INSTALLATION.
THE MANUFACTURER OF THE PREFABRICATED EXPANSION DAM SHALL SUBMIT DRAWINGS CONFORMING
TO THE APPLICABLE REQUIREMENTS OF SECTION 607.4 OF THE K.B.H. SPECIFICATIONS, TO THE
DIVISION OF BRIDGES. THE EXPANSION DEVICE SHALL BE INSTALLED AS RECOMMENDED
BY THE MANUFACTURER AND UNDER THE MANUFACTURER'S SUPERVISION.

STYROFOAM FORM FOR DIAPHRAGM KEYS

A STYROFOAM PAD SHALL BE USED, IN FORMING THE DIAPHRAGM KEY, THAT IS SUFFICIENTLY BRITTLE TO BE
REMOVED AFTER THE CONCRETE IN THE DIAPHRAGM HAS SET. THE STYROFOAM PAD SHALL BE OF
SUFFICIENT STRENGTH TO WITHSTAND THE WEIGHT OF THE WET CONCRETE WITHOUT DEFLECTION IN EXCESS
OF 25%. TO WITHSTAND SUCH FORCE THE STYROFOAM SHOULD EXERT A FORCE OF 5 PSI AT 25%
DEFLECTION. A STYROFOAM SAMPLE, ACCOMPANIED BY A STATEMENT GIVING THE HEIGHT OF THE WET CONCRETE
THAT IS TO BE PLACED ON TOP OF THE STYROFOAM, SHALL BE SUBMITTED TO THE DIRECTOR OF THE
MATERIALS DIVISION, BUREAU OF HIGHWAYS, FRANKFORT, KENTUCKY, FOR TESTING AND APPROVAL. THE STYROFOAM
SHALL NOT BE PLACED UNTIL IT HAS BEEN APPROVED BY THE DIVISION OF MATERIALS TESTING LABORATORY.
WHEN THE CONCRETE IN THE DIAPHRAGM HAS SET, THE STYROFOAM SHALL BE REMOVED.

KY. 383 OVER RED RIVER SHEET 3
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
SIMPSON
TENNESSEE STATE LINE - FRANKLIN
STATION 21+99.00 ROAD P.E. PROJECT NO.
CONSTRUCTION PROJECT NO. SURVEYOR PROJECT NO. 19593

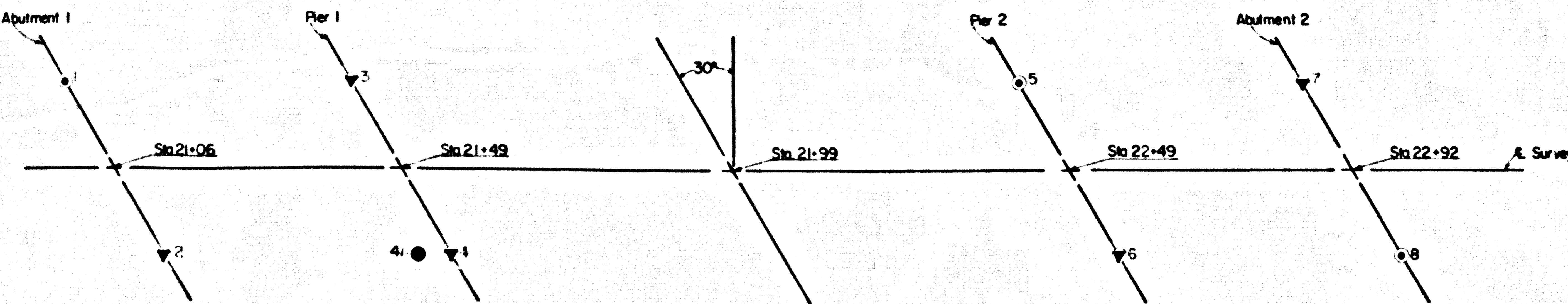
BRIDGE

SUBSURFACE EXPLORATION PLAN

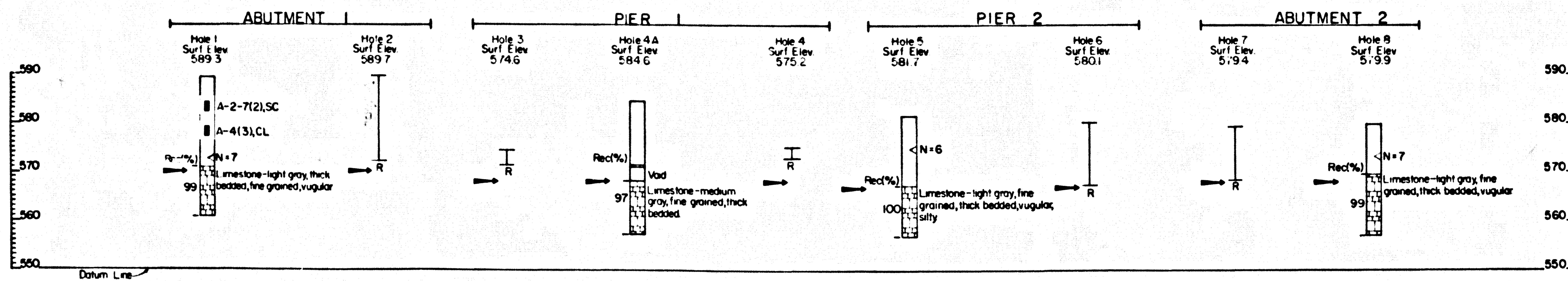
UPDATE DATE
LETTING DATE

LEGEND:

- Rock Core Boring
- Rock Core and Sample Boring
- ▼ Rock Line Sounding
- Thin Walled Tube Sample
- Refusal
- Approximate Footing Elevation
- Standard Penetration Test
- Allowable Bearing Capacity is estimated to be 15 tsf
- Scale 1"=10'



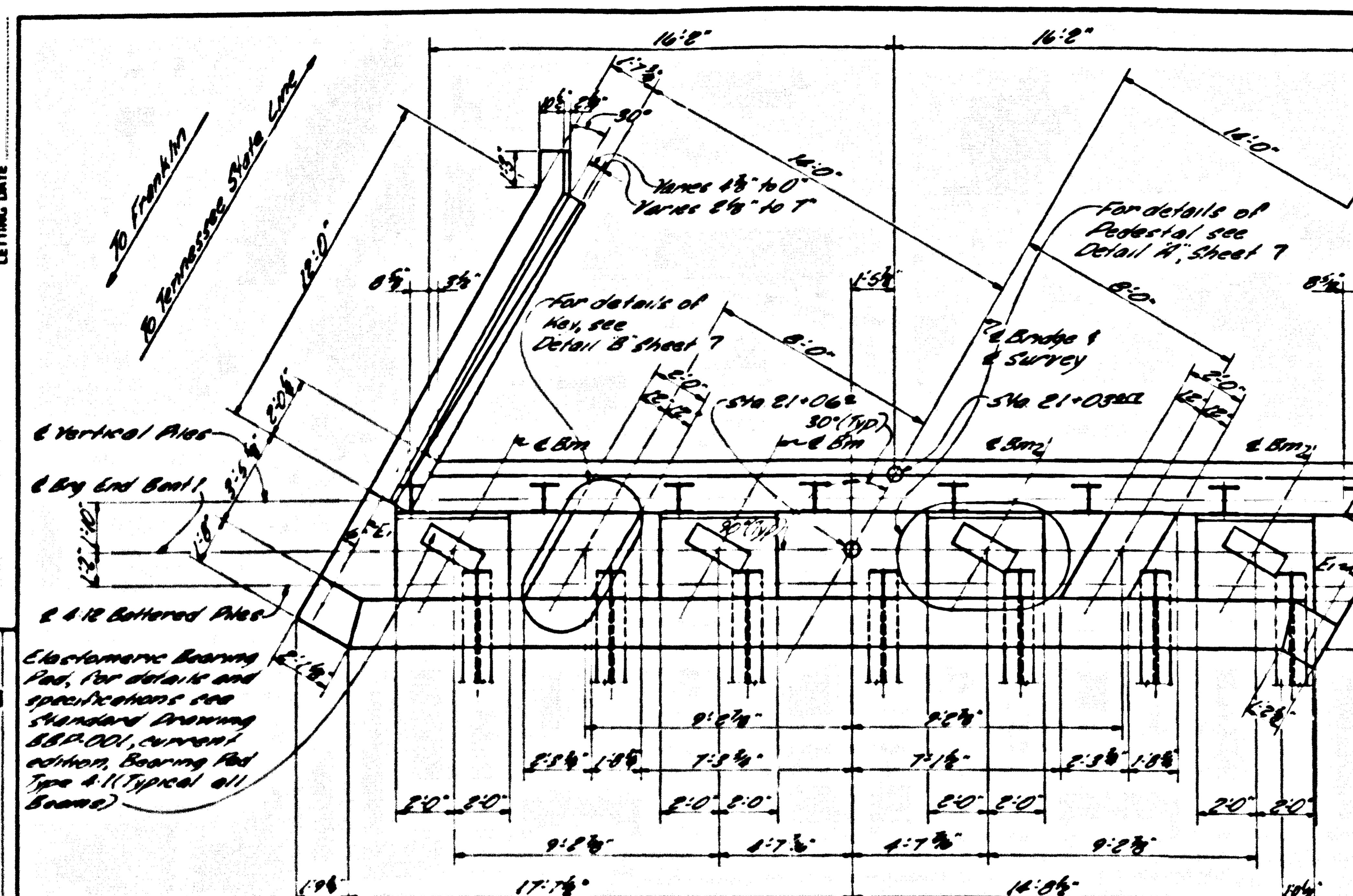
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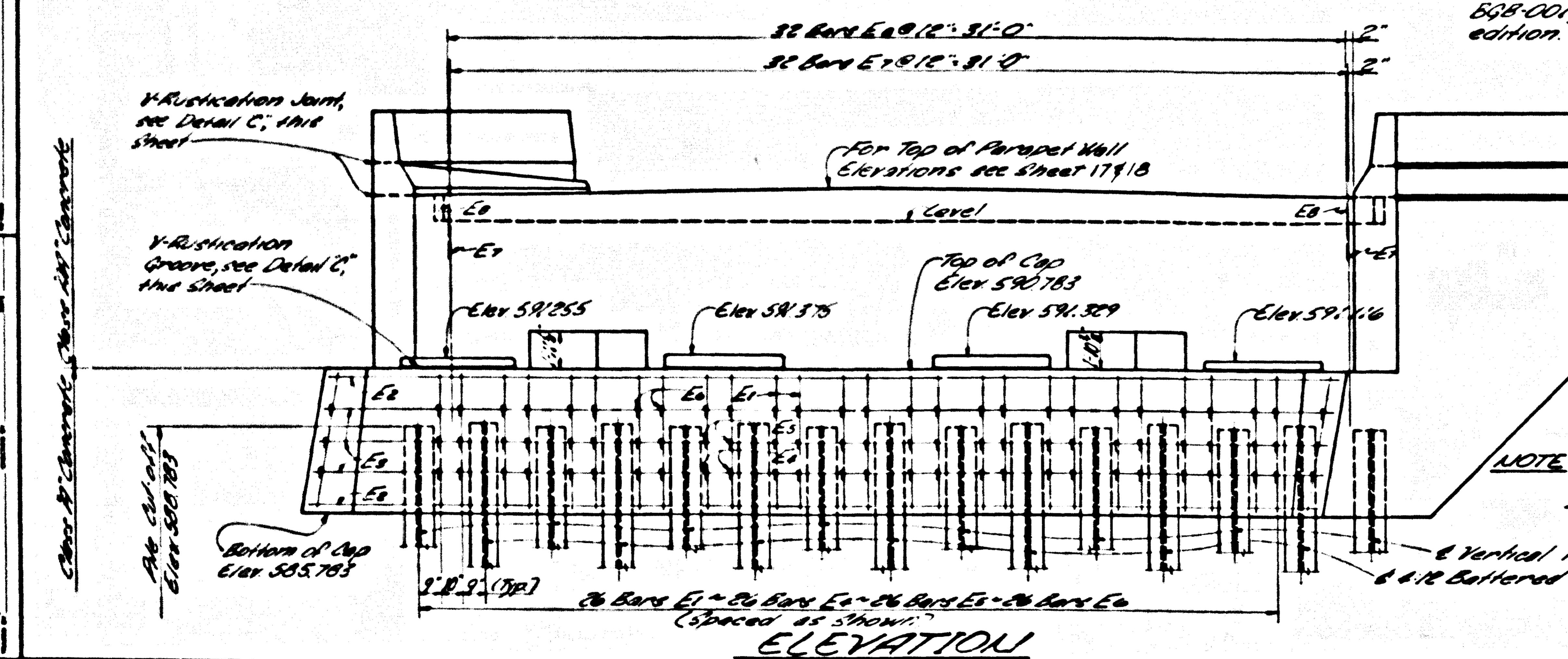
SHEET 5
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
 FRANKFORT
 COUNTY OF
SIMPSON
 Ky 383 over Red River
 ROAD No. BRS 5070(1)
 P.E. PROJECT NO. SP107-105-2
 CONSTRUCTION PROJECT NO. 19593

BRIDGE

UPDATE DATE _____



PLAN OF CAP



JO BENT /

NOTE: For location of Piles
and Dike Records see
Sheet 18

Vertical Pilots or Bottomed Pilots

WORK THIS SHOT
WITH STREET 7

KY. 383 OVER RED RIVER. SHEET 6

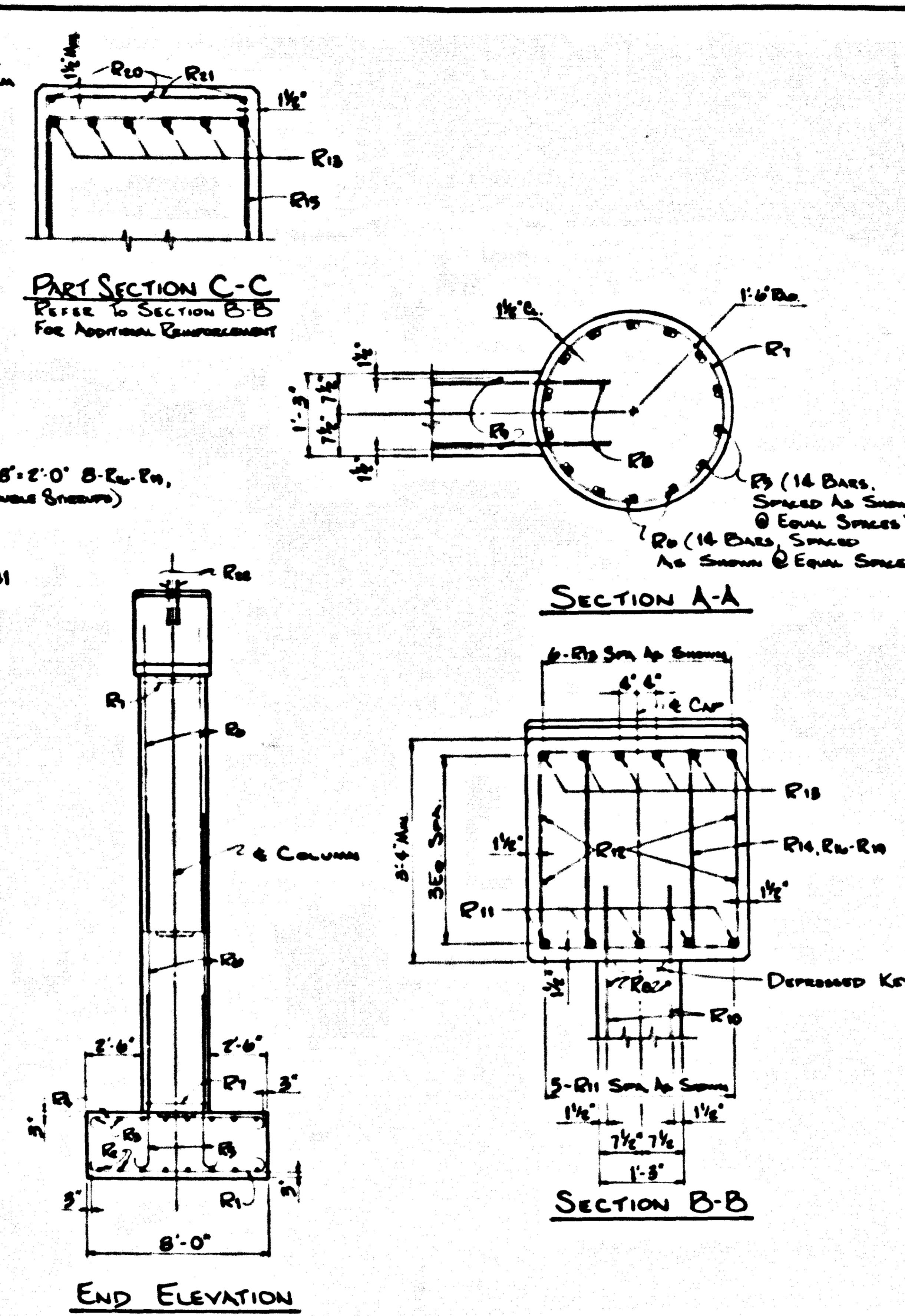
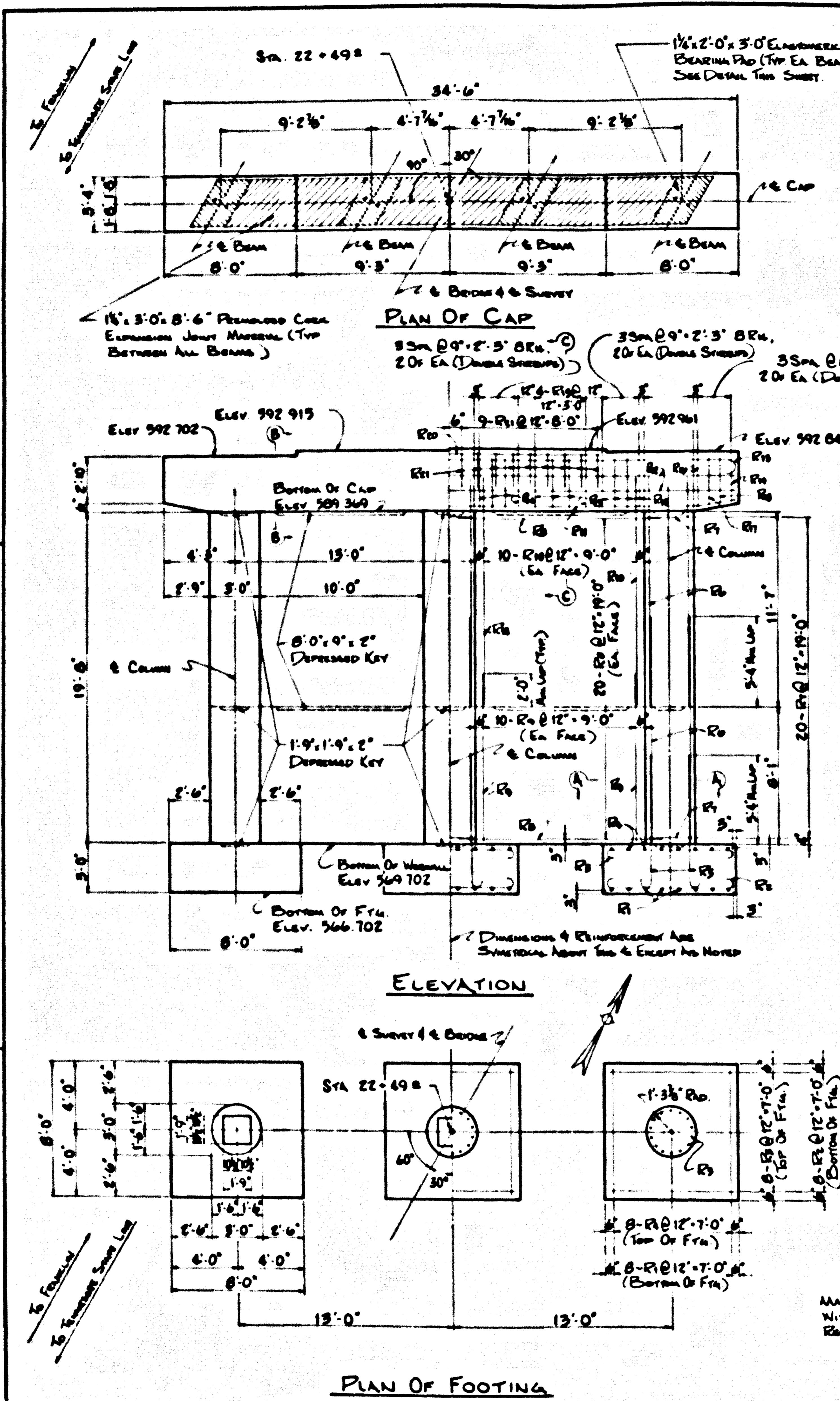
**COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
SIMPSON
TENNESSEE STATE LINE-FRANKLIN**

ROAD
STATION 21+99⁸ PE PROJECT NO.
CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO.
19593

BRIDGE

LETTING DATE

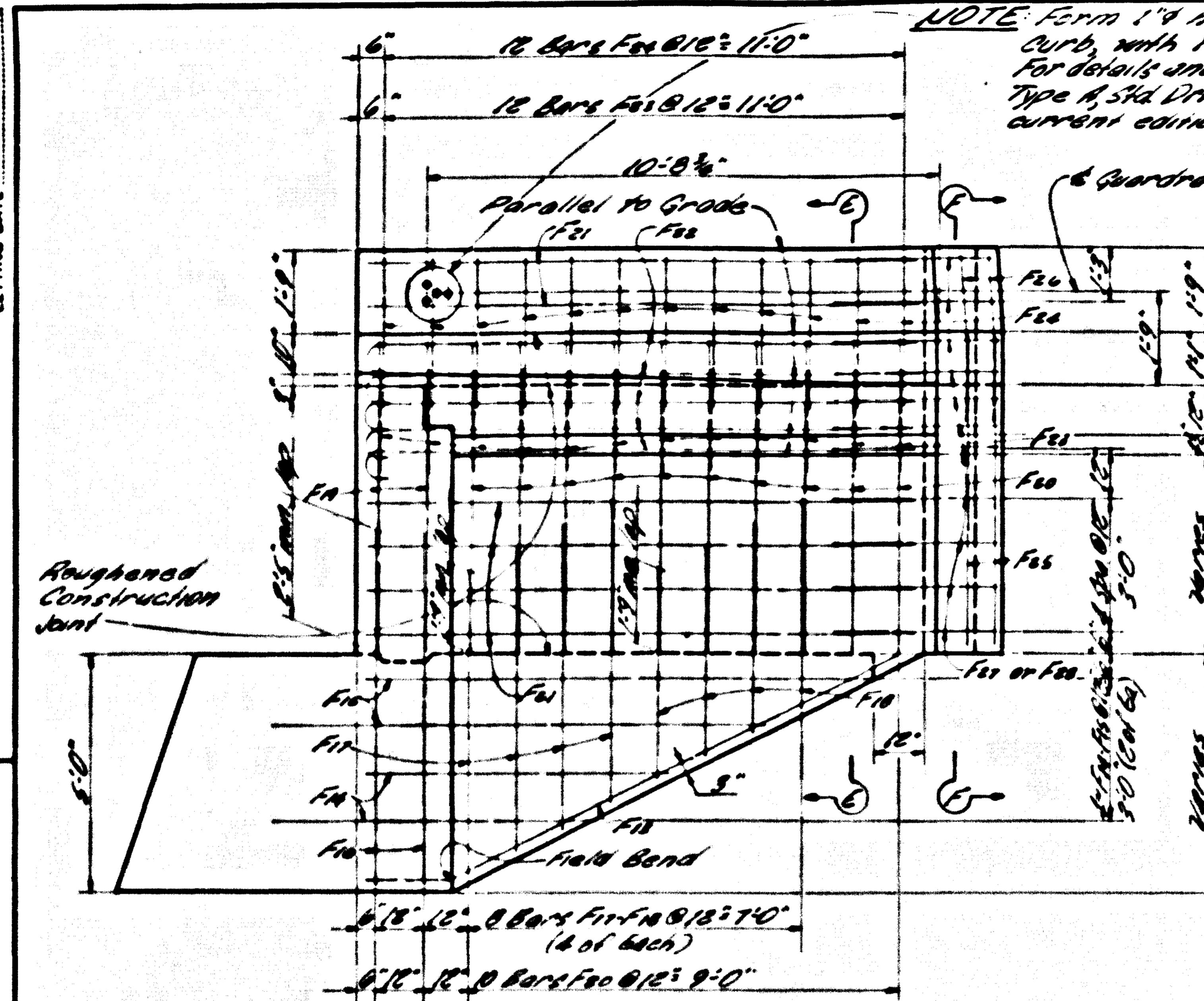
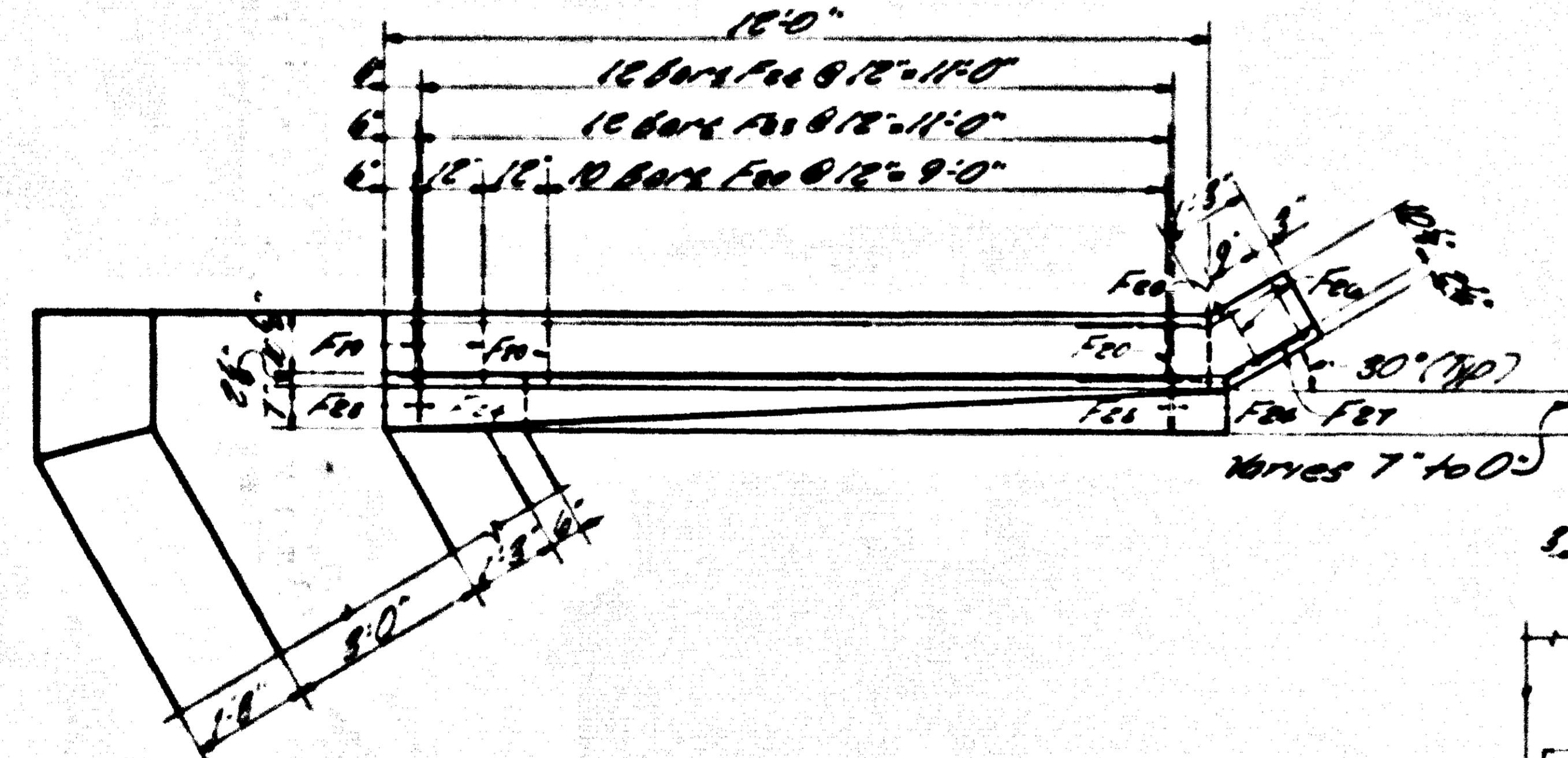
REVISION NO. 1
ALL Dimensions in FEET



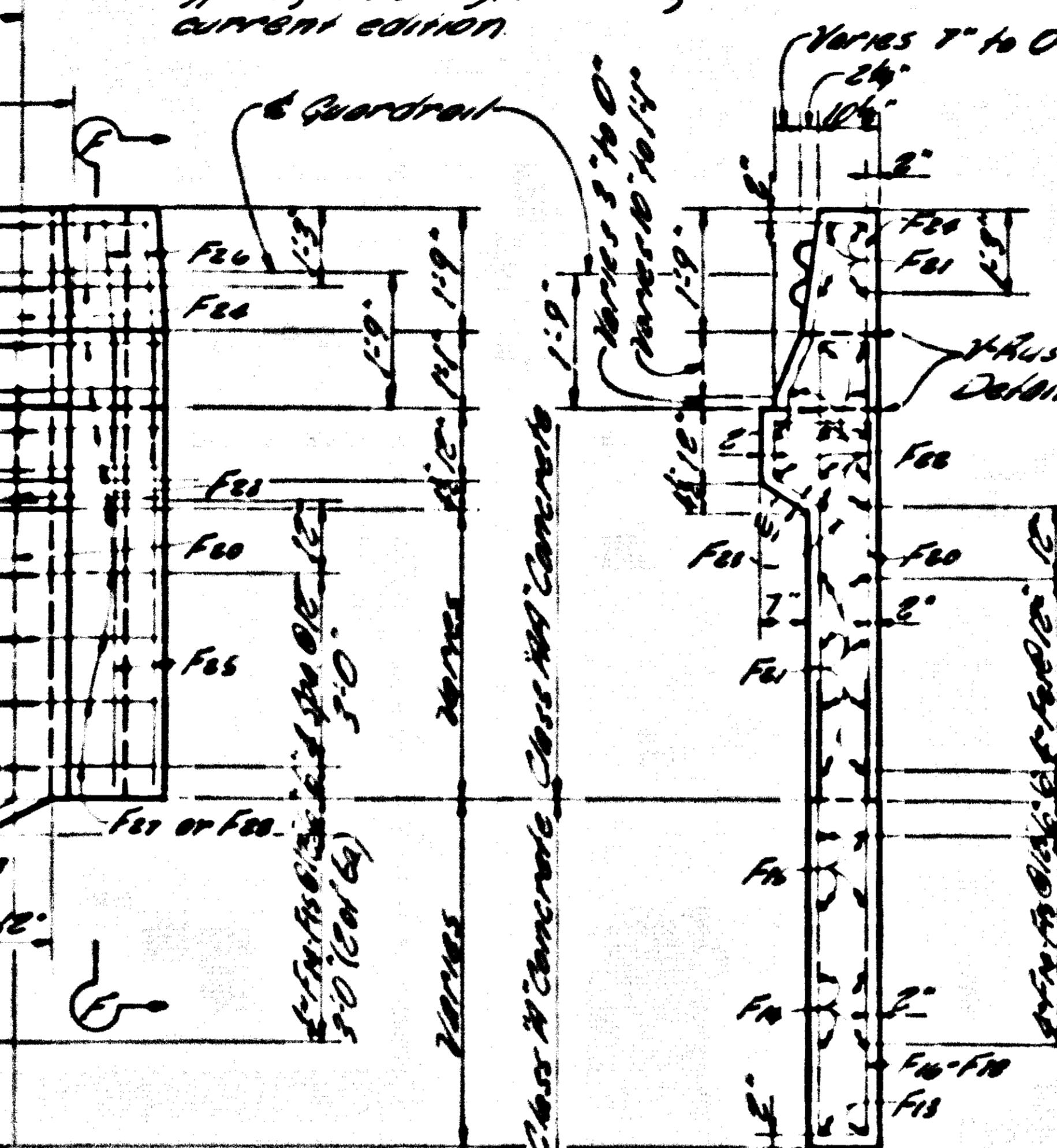
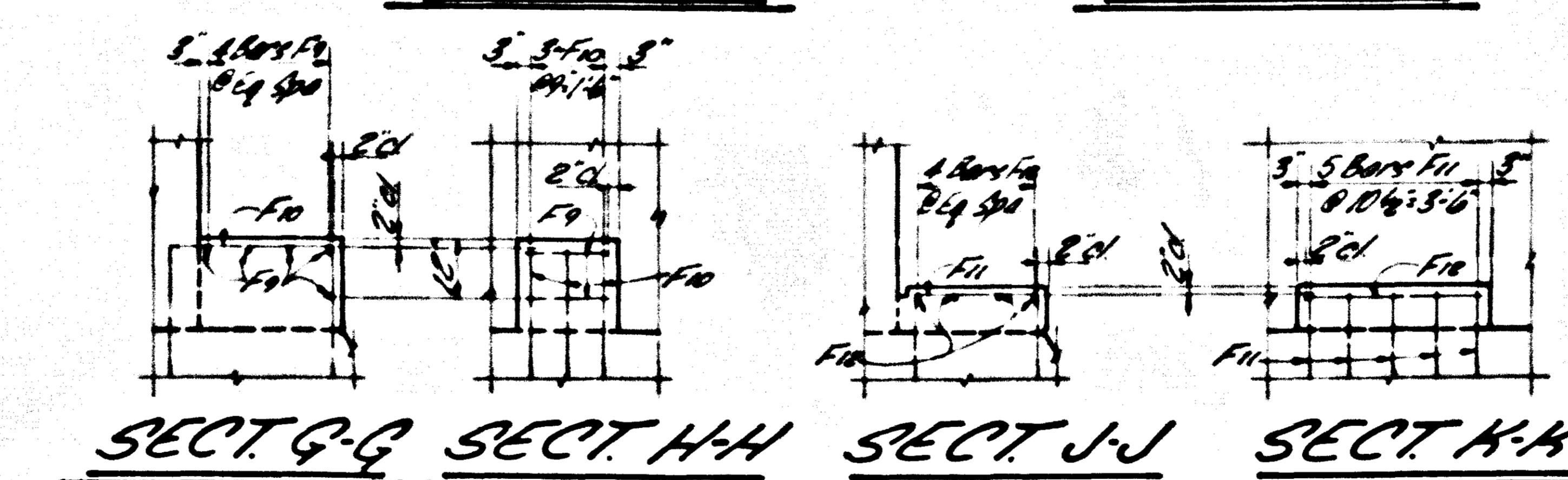
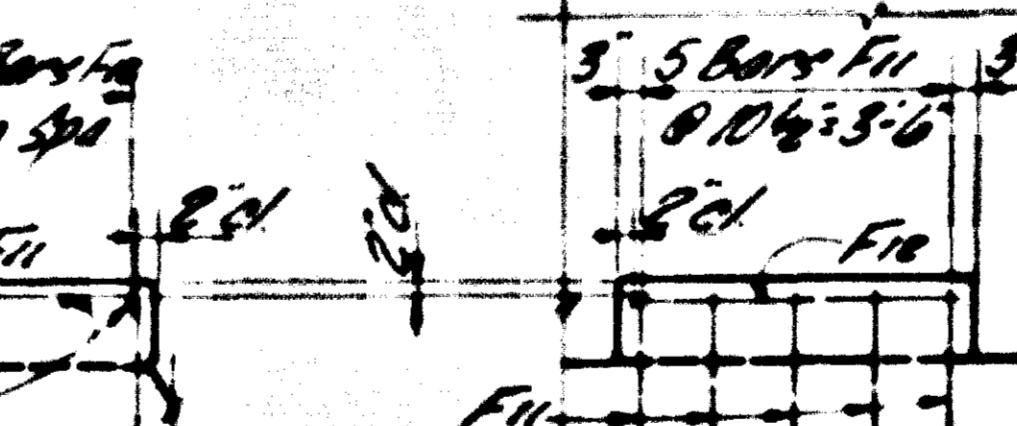
BILL OF REINFORCEMENT													
MARK	TYPE	NO.	SIZE	LENGTH FT. IN.	LOCATION	A FT. IN.				B FT. IN.			
						C FT. IN.	D FT. IN.	E FT. IN.	F FT. IN.	G FT. IN.	H FT. IN.	I FT. IN.	J FT. IN.
R1	①	24	17	0 3	Footings -	6 11	7	0	9				
R2	②	24	5	0 5		6 6		7	6				
R3	③	24	6	0 6		7 1	7	6	0				
R4	④	42	8	10 6		7 1	7	6	0				
R5	⑤	84	9	13 2		7 1	7	6	0				
R6	⑥	60	9	13 2		7 1	7	6	0				
R7	⑦	80	12	0		7 1	7	6	0				
R8	⑧	40	13	1		7 1	7	6	0				
R9	⑨	34	3	0		7 1	7	6	0				
R10	⑩	36	2	0		7 1	7	6	0				
R11	⑪	36	1	0		7 1	7	6	0				
R12	⑫	36	1	0		7 1	7	6	0				
R13	⑬	36	1	0		7 1	7	6	0				
R14	⑭	36	1	0		7 1	7	6	0				
R15	⑮	36	1	0		7 1	7	6	0				
R16	⑯	36	1	0		7 1	7	6	0				
R17	⑰	36	1	0		7 1	7	6	0				
R18	⑱	36	1	0		7 1	7	6	0				
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R21	㉑	36	1	0		7 1	7	6	0				
R22	㉒	36	1	0		7 1	7	6	0				
R23	㉓	36	1	0		7 1	7	6	0				
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R25	㉕	36	1	0		7 1	7	6	0				
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R28	㉘	36	1	0		7 1	7	6	0				
R29	㉙	36	1	0		7 1	7	6	0				
R30	㉚	36	1	0		7 1	7	6	0				
R31	㉛	36	1	0		7 1	7	6	0				
R32	㉜	36	1	0		7 1	7	6	0				
R33	㉝	36	1	0		7 1	7	6	0				
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R56	㉟	36	1	0		7 1	7	6	0				
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R58	㉟	36	1	0		7 1	7	6	0				
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R68	㉟	36	1	0		7 1	7	6	0				
R69	㉟	36	1	0		7 1	7	6	0				
R70	㉟	36	1	0		7 1	7	6	0				
R71	㉟	36	1	0		7 1	7	6	0				
R72	㉟	36	1	0		7 1	7	6	0				
R73	㉟	36	1	0		7 1	7	6	0				
R74	㉟	36	1	0		7 1	7	6	0				
R75	㉟	36	1	0		7 1	7	6	0				
R76	㉟	36	1	0		7 1	7	6	0				
R77	㉟	36	1	0		7 1	7	6	0				
R78	㉟	36	1	0		7 1	7	6	0				
R7													

UPDATE DATE

LETTING DATE

WING ELEVATIONPLAN OF CURB

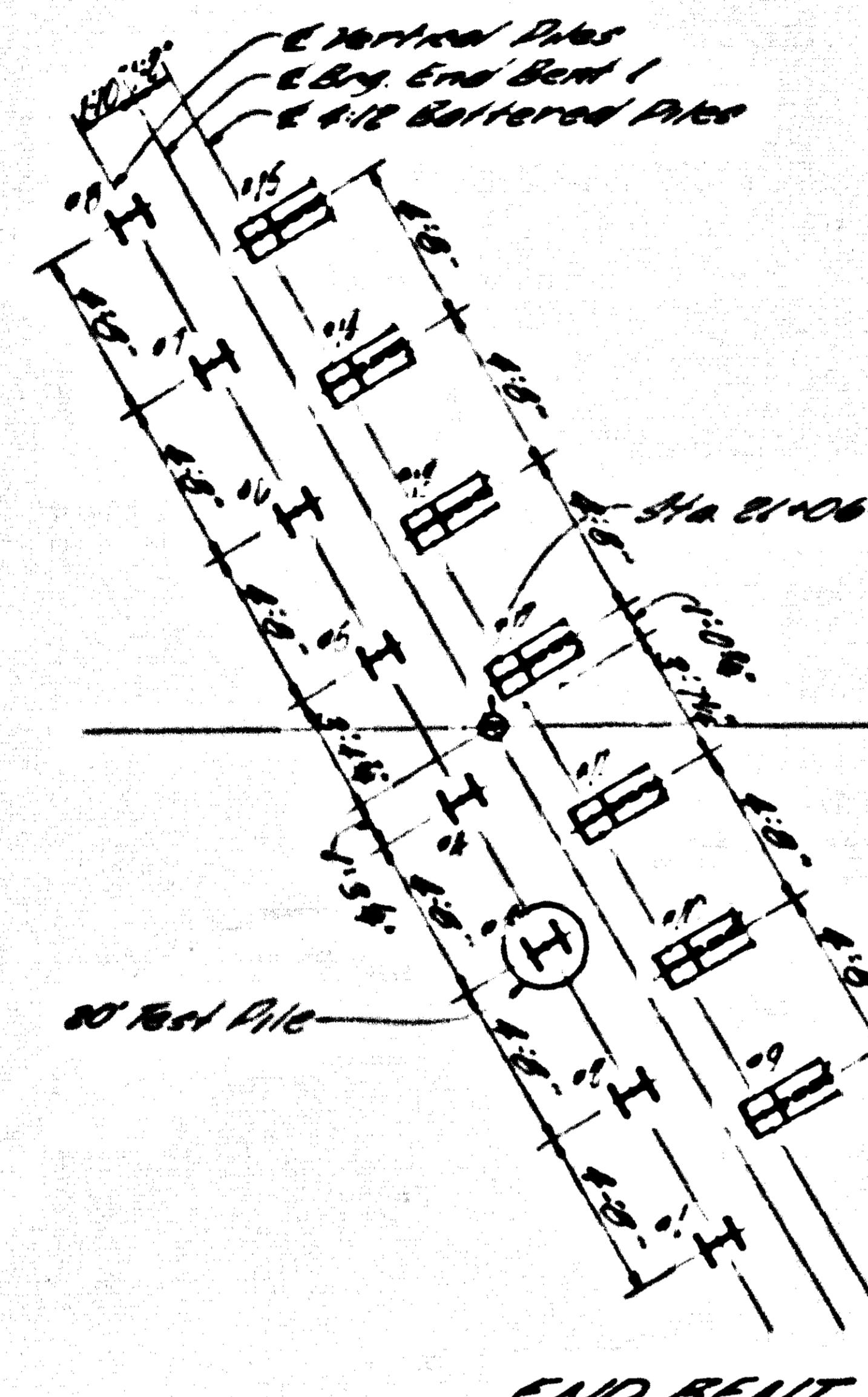
NOTE: Form 1" holes through Barrier Curb perpendicular to traffic side of Barrier Curb, with 1" I.D. Plastic Pipe which shall remain in place after fabrication. For details and specifications see Roadway Plans. Guardrail Connector to Bridge End Type A Std Drawing RBG-2003 current edition

SECTION E-EDETAIL BSECTION F-FDETAIL A**BILL OF REINFORCEMENT**

M	D	W	L	Location	Quantity
1	12	10	5'-0"	Bridge End	1
2	12	10	5'-0"	Bridge End	1
3	12	10	5'-0"	Bridge End	1
4	12	10	5'-0"	Bridge End	1
5	12	10	5'-0"	Bridge End	1
6	12	10	5'-0"	Bridge End	1
7	12	10	5'-0"	Bridge End	1
8	12	10	5'-0"	Bridge End	1
9	12	10	5'-0"	Bridge End	1
10	12	10	5'-0"	Bridge End	1
11	12	10	5'-0"	Bridge End	1
12	12	10	5'-0"	Bridge End	1
13	12	10	5'-0"	Bridge End	1
14	12	10	5'-0"	Bridge End	1
15	12	10	5'-0"	Bridge End	1
16	12	10	5'-0"	Bridge End	1
17	12	10	5'-0"	Bridge End	1
18	12	10	5'-0"	Bridge End	1
19	12	10	5'-0"	Bridge End	1
20	12	10	5'-0"	Bridge End	1
21	12	10	5'-0"	Bridge End	1
22	12	10	5'-0"	Bridge End	1
23	12	10	5'-0"	Bridge End	1
24	12	10	5'-0"	Bridge End	1
25	12	10	5'-0"	Bridge End	1
26	12	10	5'-0"	Bridge End	1
27	12	10	5'-0"	Bridge End	1
28	12	10	5'-0"	Bridge End	1
29	12	10	5'-0"	Bridge End	1
30	12	10	5'-0"	Bridge End	1
31	12	10	5'-0"	Bridge End	1
32	12	10	5'-0"	Bridge End	1
33	12	10	5'-0"	Bridge End	1
34	12	10	5'-0"	Bridge End	1
35	12	10	5'-0"	Bridge End	1
36	12	10	5'-0"	Bridge End	1
37	12	10	5'-0"	Bridge End	1
38	12	10	5'-0"	Bridge End	1
39	12	10	5'-0"	Bridge End	1
40	12	10	5'-0"	Bridge End	1
41	12	10	5'-0"	Bridge End	1
42	12	10	5'-0"	Bridge End	1
43	12	10	5'-0"	Bridge End	1
44	12	10	5'-0"	Bridge End	1
45	12	10	5'-0"	Bridge End	1
46	12	10	5'-0"	Bridge End	1
47	12	10	5'-0"	Bridge End	1
48	12	10	5'-0"	Bridge End	1
49	12	10	5'-0"	Bridge End	1
50	12	10	5'-0"	Bridge End	1
51	12	10	5'-0"	Bridge End	1
52	12	10	5'-0"	Bridge End	1
53	12	10	5'-0"	Bridge End	1
54	12	10	5'-0"	Bridge End	1
55	12	10	5'-0"	Bridge End	1
56	12	10	5'-0"	Bridge End	1
57	12	10	5'-0"	Bridge End	1
58	12	10	5'-0"	Bridge End	1
59	12	10	5'-0"	Bridge End	1
60	12	10	5'-0"	Bridge End	1
61	12	10	5'-0"	Bridge End	1
62	12	10	5'-0"	Bridge End	1
63	12	10	5'-0"	Bridge End	1
64	12	10	5'-0"	Bridge End	1
65	12	10	5'-0"	Bridge End	1
66	12	10	5'-0"	Bridge End	1
67	12	10	5'-0"	Bridge End	1
68	12	10	5'-0"	Bridge End	1
69	12	10	5'-0"	Bridge End	1
70	12	10	5'-0"	Bridge End	1
71	12	10	5'-0"	Bridge End	1
72	12	10	5'-0"	Bridge End	1
73	12	10	5'-0"	Bridge End	1
74	12	10	5'-0"	Bridge End	1
75	12	10	5'-0"	Bridge End	1
76	12	10	5'-0"	Bridge End	1
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79	12	10	5'-0"	Bridge End	1
80	12	10	5'-0"	Bridge End	1
81	12	10	5'-0"	Bridge End	1
82	12	10	5'-0"	Bridge End	1
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89	12	10	5'-0"	Bridge End	1
90	12	10	5'-0"	Bridge End	1
91	12	10	5'-0"	Bridge End	1
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93	12	10	5'-0"	Bridge End	1
94	12	10	5'-0"	Bridge End	1
95	12	10	5'-0"	Bridge End	1
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101	12	10	5'-0"	Bridge End	1
102	12	10	5'-0"	Bridge End	1
103	12	10	5'-0"	Bridge End	1
104	12	10	5'-0"	Bridge End	1
105	12	10	5'-0"	Bridge End	1
106	12	10	5'-0"	Bridge End	1
107	12	10	5'-0"	Bridge End	1
108	12	10	5'-0"	Bridge End	1
109	12	10	5'-0"	Bridge End	1
110	12	10	5'-0"	Bridge End	1
111	12	10	5'-0"	Bridge End	1
112	12	10	5'-0"	Bridge End	1
113	12	10	5'-0"	Bridge End	1
114	12	10	5'-0"	Bridge End	1
115	12	10	5'-0"	Bridge End	1
116	12	10	5'-0"	Bridge End	1
117	12	10	5'-0"	Bridge End	1
118	12	10	5'-0"	Bridge End	1
119	12	10	5'-0"	Bridge End	1
120	12	10	5'-0"	Bridge End	1
121	12	10	5'-0"	Bridge End	1
122	12	10	5'-0"	Bridge End	1
123	12	10	5'-0"	Bridge End	1
124	12	10	5'-0"	Bridge End	1
125	12	10	5'-0"	Bridge End	1
126					

UPDATE DATE

LEAVING DATE

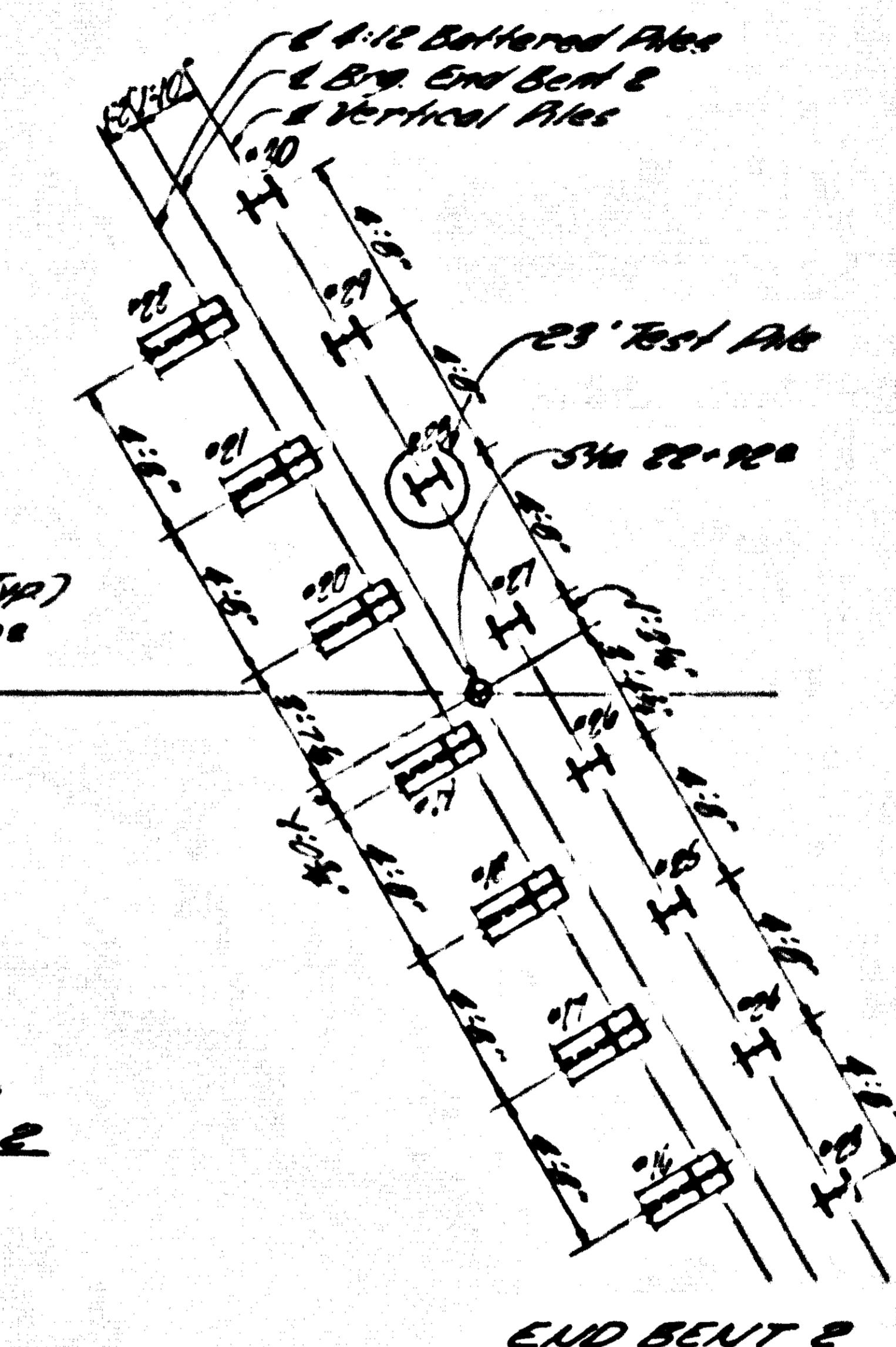


PIER 1

NOTE: All piles are H.P. 12-158
All dimensions are given
at bottom of End Bent Cap

Bridge & Survey

PILE LAYOUT



PIER 2

PILE RECORD					
END BENT 1			END BENT 2		
Pile No.	Cut-off Elevation as shown on Plans	To or the Elevation as Driven	Pile length in Place	Pile length in Place	Calculated Bearing Capacity
1	514.21+23				
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15	514.21+23				
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30	514.21+23				

NOTE: After all piles have been driven, the Resident Engineer shall record for each pile, the Tip of Pile Elevation as Driven, the Pile Length in Place and the Calculated Bearing Capacity and shall return one blueprint copy of this sheet with this data to the Director of the Division of Bridges so that the data may be recorded on the original Plans.
Pile length in place shown herein are the actual lengths of piles in the finished finished structure below cut-off elevation.
This Pile Record does not replace other records of piles required to be kept and submitted by the Resident Engineer.

KY 383 OVER RED RIVER SHEET 12
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
SIMPSON
TENNESSEE STATE LINE-FRANKLIN
ROAD P.E. PROJECT NO.
CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO.
DRAWING NO. 19593

PILE LAYOUT AND PILE RECORD

BRIDGE

UPDATE DATE

LETTING DATE

NOTE:
For S3(E) are to be placed beneath the
longitudinal and transverse reinforcement
in the top of slab.

NOTE:
Place 7 Bars S3(E) at 15'
center to center on Radial
line (Typical Each Axle
corner or End of Slab)

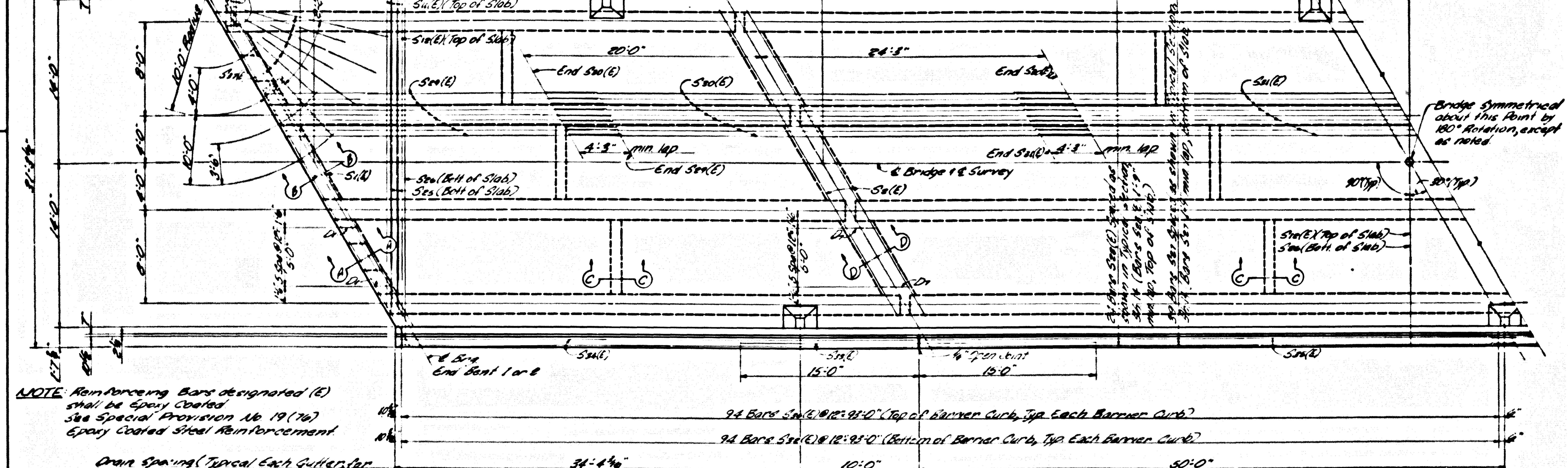
606 36 Bars 31W 31(0.85-.14-.7" S.
(1 of Each, Top of Slab)

216 80 Bars 512-528 0.75-.14-.7" S.
(2 of Each, Bottom of Slab)
(S3(E) Top of Slab)
(S3(E) Bottom of Slab)

147 Bars S3(E) 0.7-.05-.5" (Top of Slab)

188-8 1/2" Out to Out of Slab

50'-0"



NOTE: Reinforcing Bars designated (E)
shall be Epoxy Coated
see Special Provision No 19(7a)
Epoxy Coated Steel Reinforcement.

Drain Spacing (Typical Each Gutter), for
details and specifications see Drain Details 3415.

NOTE: Bend Transverse and Longitudinal
Reinforcement is Slab so as not to
interfere with Drains Openings.

PLAN

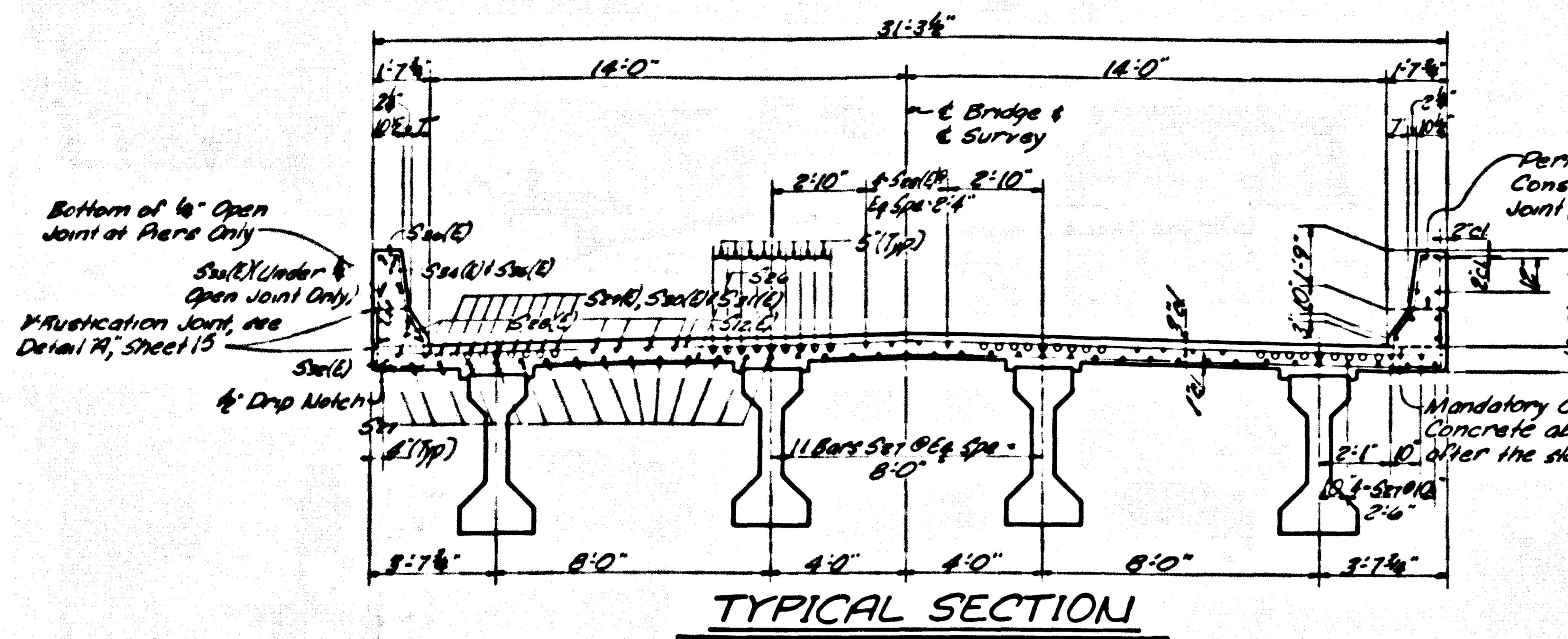
Work This Sheet
With Sheets 14 & 15

SUPERSTRUCTURE

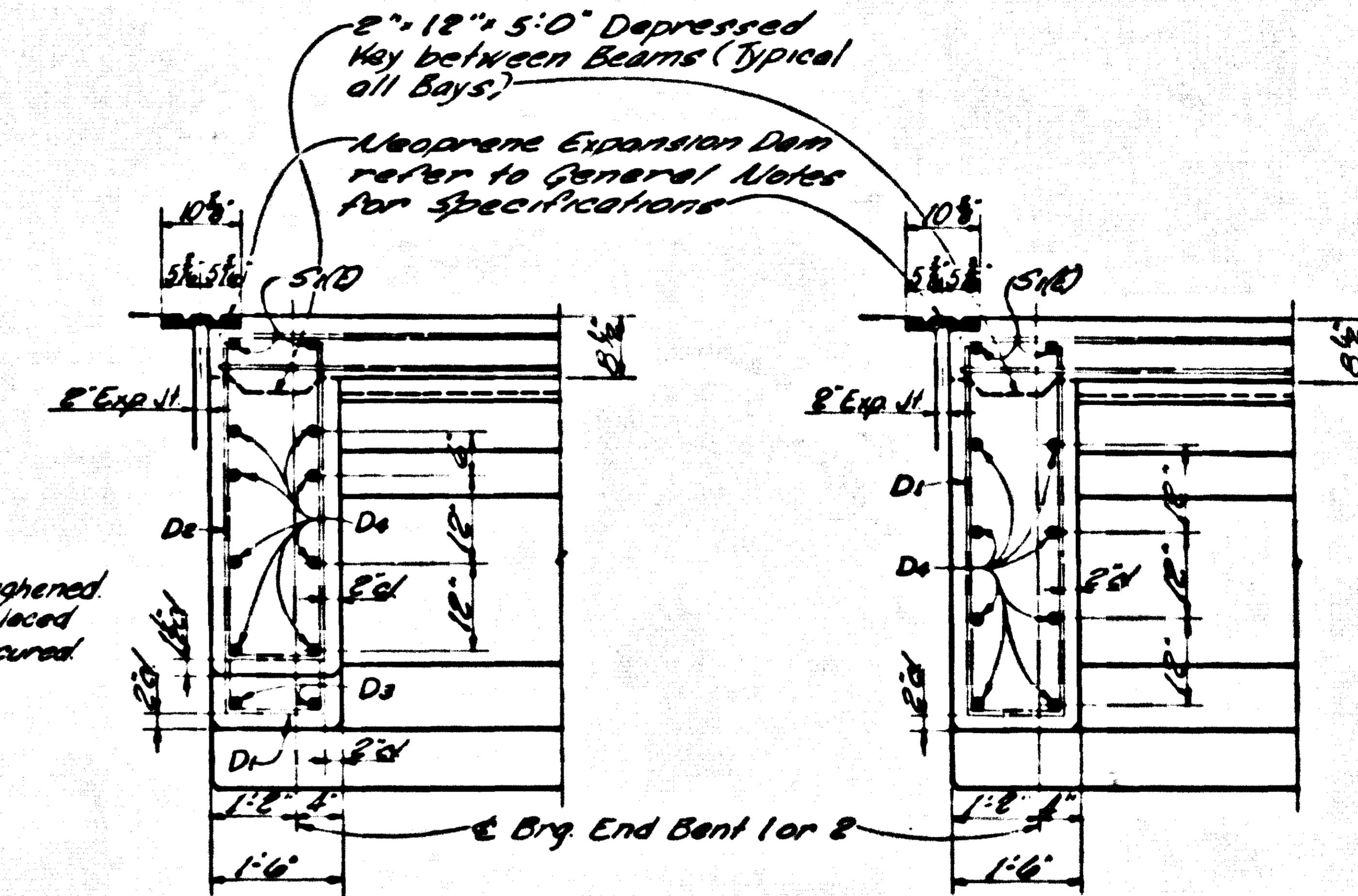
KY 383 OVER RED RIVER SHEET 19
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
SIMPSON
TENNESSEE STATE LINE - FRANKLIN
ROAD P.E. PROJECT NO. 19593
STATION 21+99.8 CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. 19593

NEW BRIDGE

UPDATE DATE
LETTING DATE

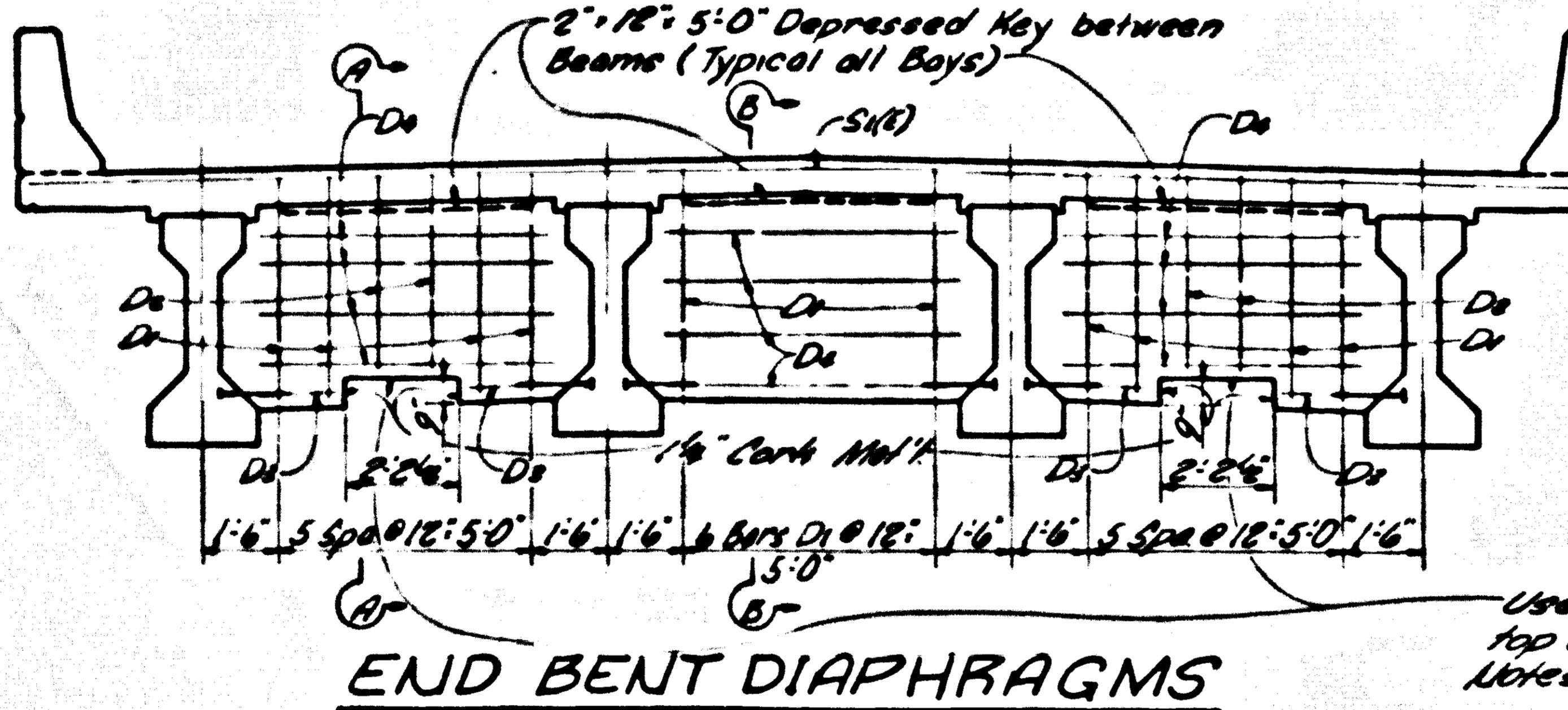


TYPICAL SECTION

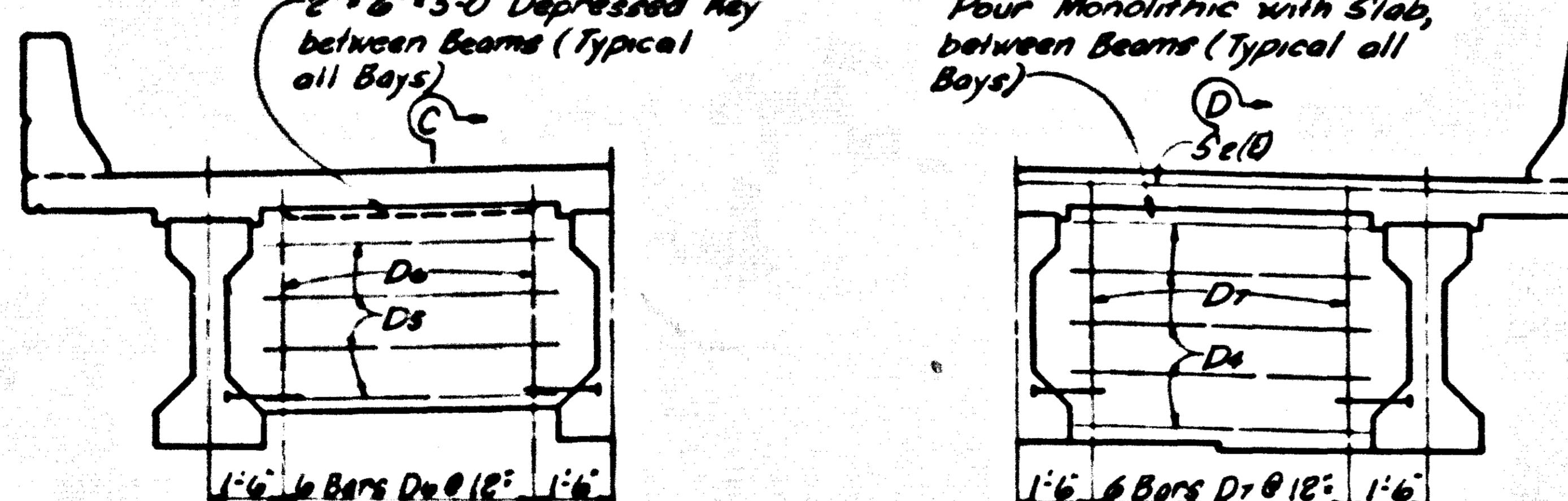


SECTION A-A

SECTION B-B



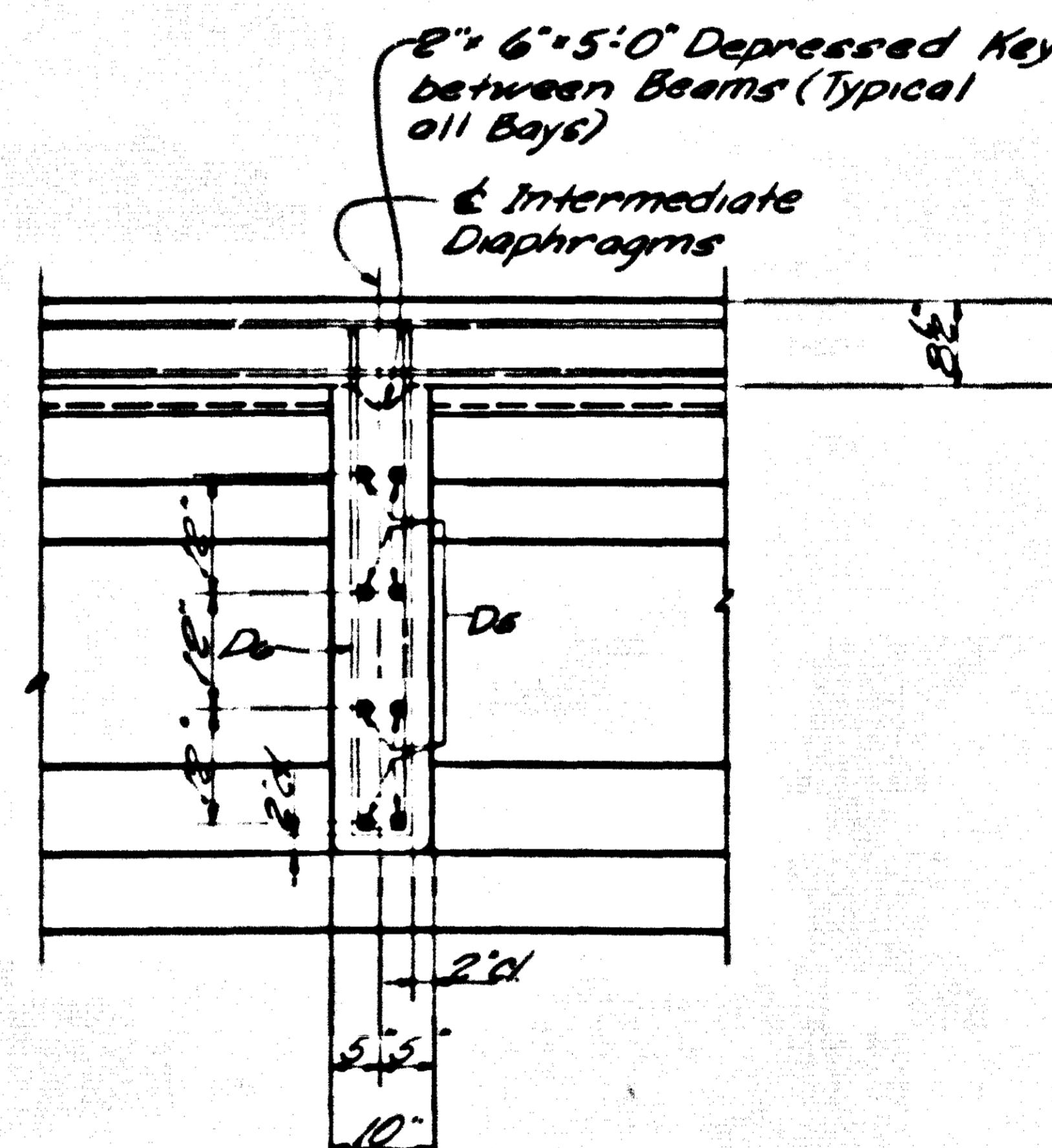
END BENT DIAPHRAGMS



INTERMEDIATE DIAPHRAGMS

PIER DIAPHRAGMS

DIAPHRAGM DETAILS



SECTION C-C

NOTE: Bars 5x10 are to be tied to the Shoring Steel in top of PCI Beams

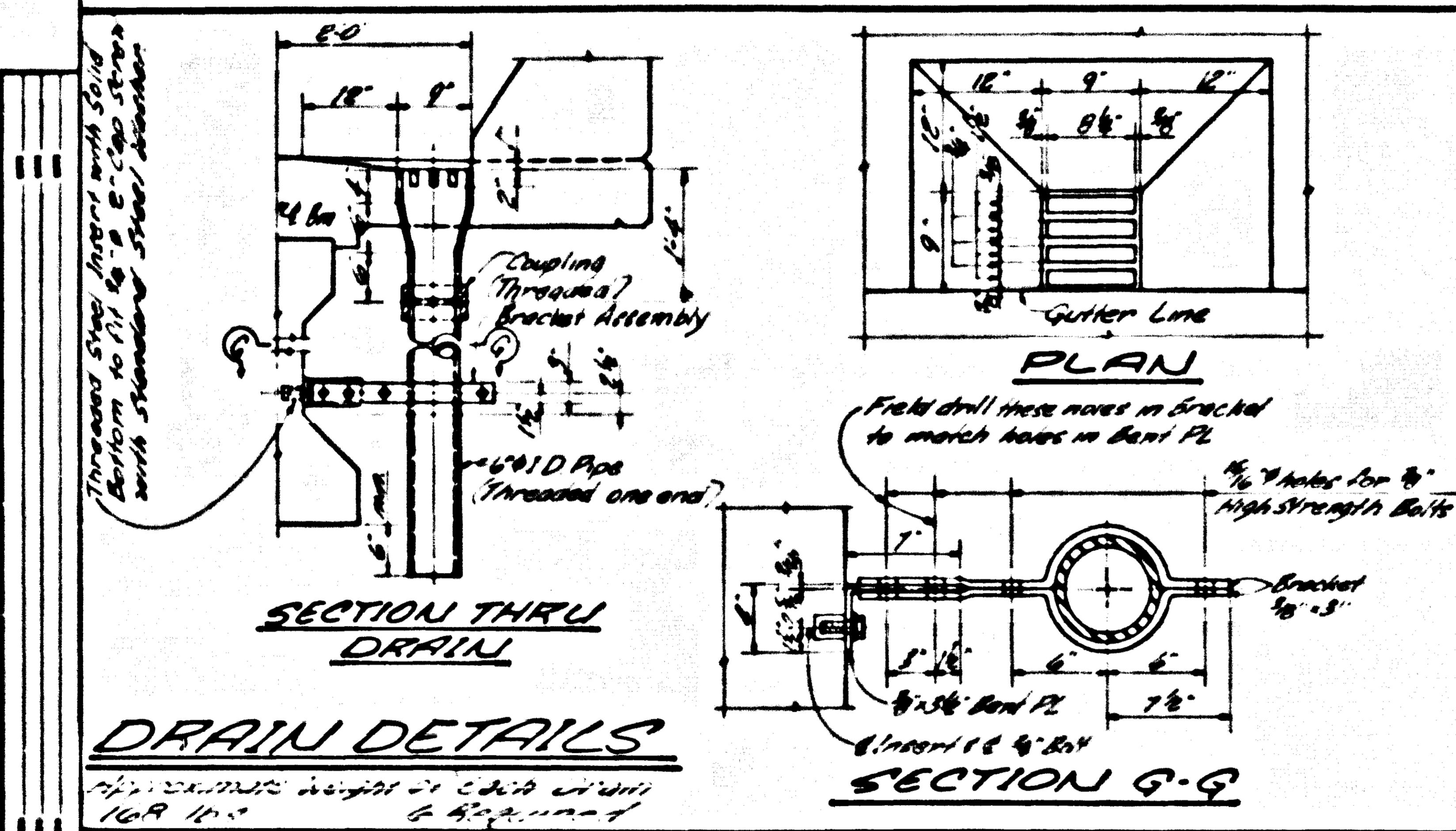
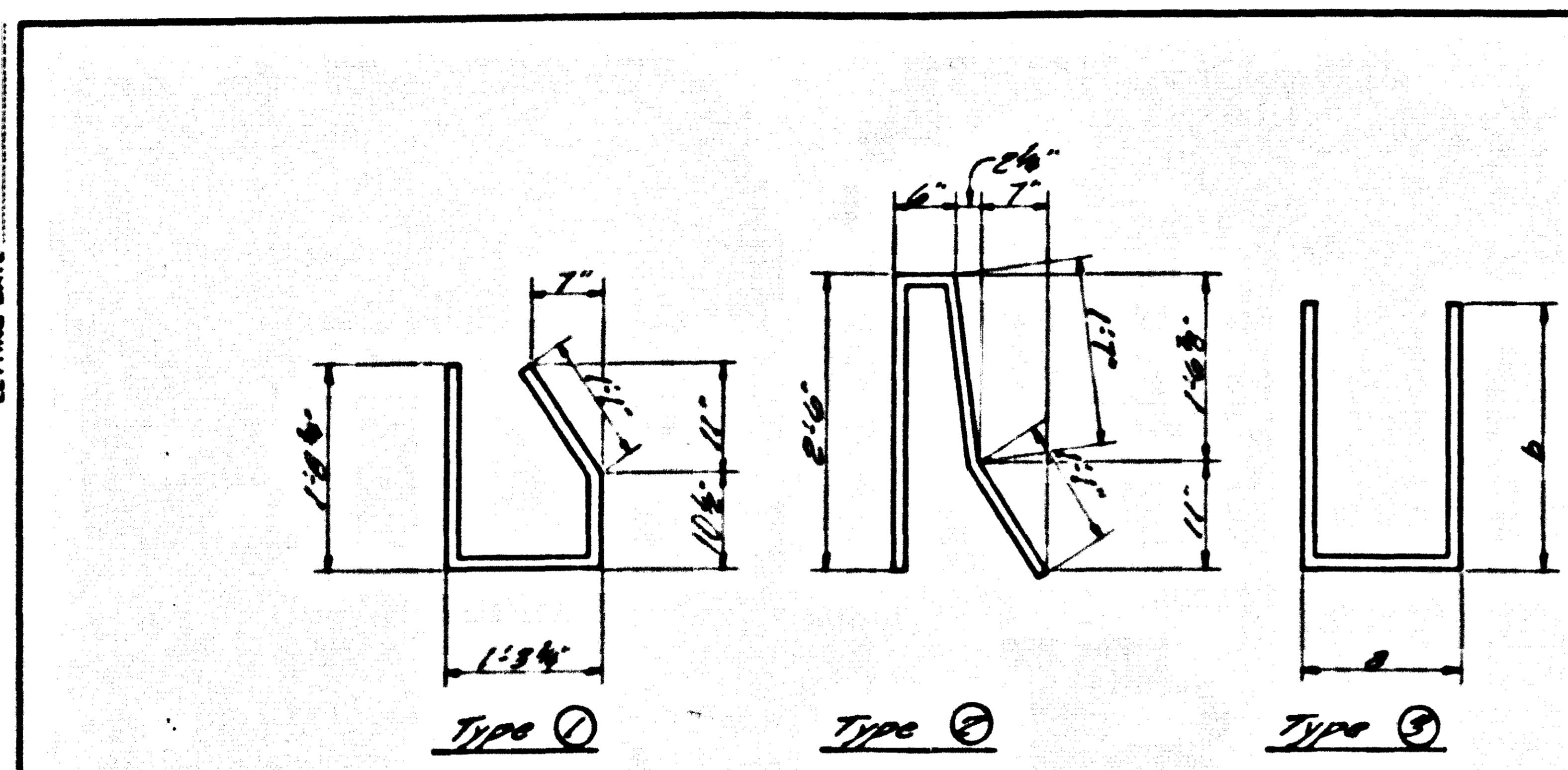
Work This Sheet
With Sheets 13 & 15

SUPERSTRUCTURE

KY. 383 OVER RED RIVER SHEET 14
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT COUNTY OF
SIMPSON
TENNESSEE STATE LINE - FRANKLIN
ROAD P.E. PROJECT NO. 145599
CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO.
DRAWING NO. 145599

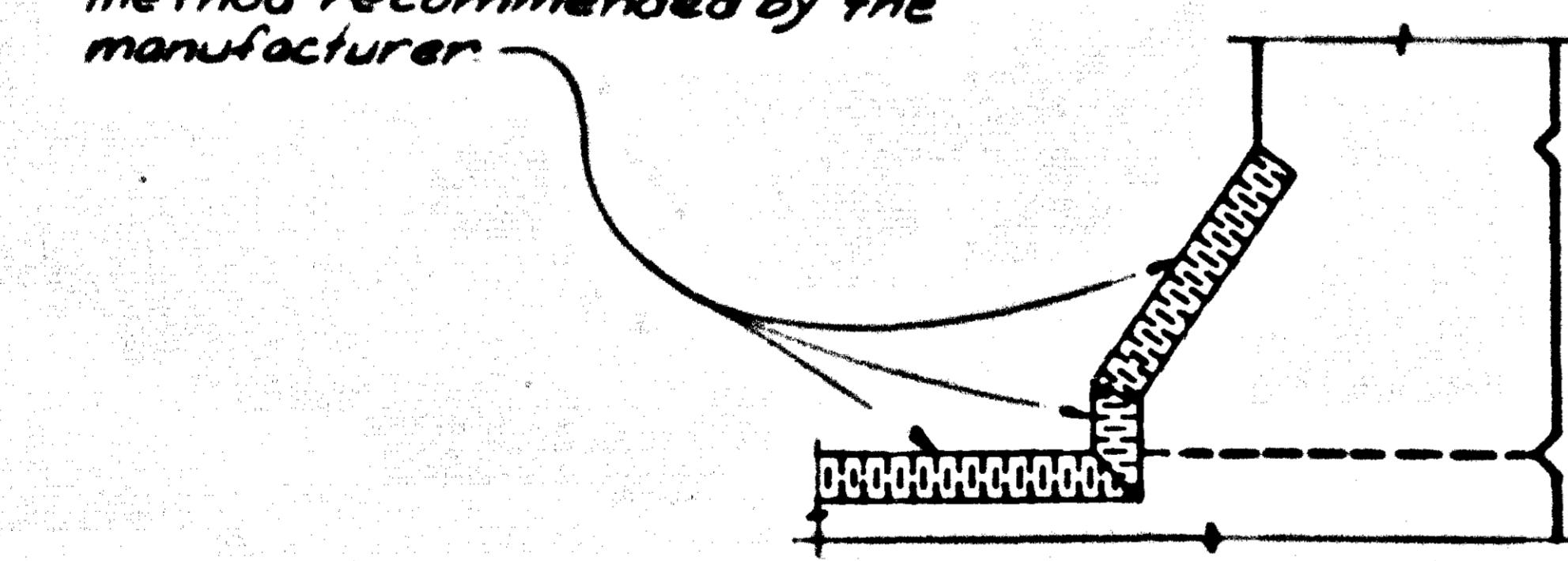
THE BRIDGE

UPDATE DATE
LETTING DATE



DRAIN DETAILS

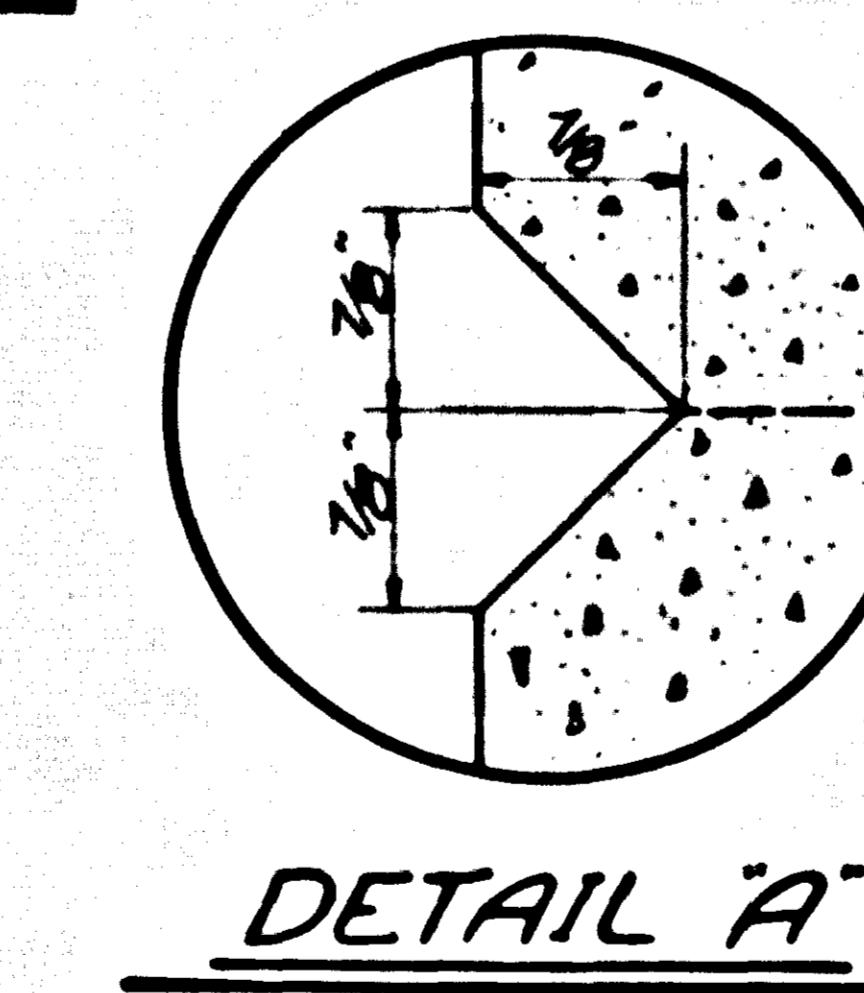
Neoprene Expansion Dam is to be installed according to the method recommended by the manufacturer.



TYPICAL SECTION THRU BARRIER CURB AT # BRG.

BILL OF REINFORCEMENT

M	Type	No.	S. $\frac{in}{ft}$	Length	Location	Ft. In					
21	3	38	6	9 9	End Bent Decking	1 4	4	5			
21	"	8	6	9 7		1 4	3	8			
21	10	"	1 11	"							
21	128	6	6	End Bent Pier Decking							
21	"	96	5	9	Intermediate Decking						
21	3	72	8 11	"		7 6	4	9			
21	36	"	10 3	Pier		8 6	4	11			



DETAIL A'

ESTIMATE OF QUANTITIES

Item	Quantities	Unit
Class AA Concrete	241.6	cu yds.
Reinforcement	21108.	lbs.
Epoxy Coated Steel Reinforcement	50859.	lbs.

Work This Sheet
With Sheets 13 & 14

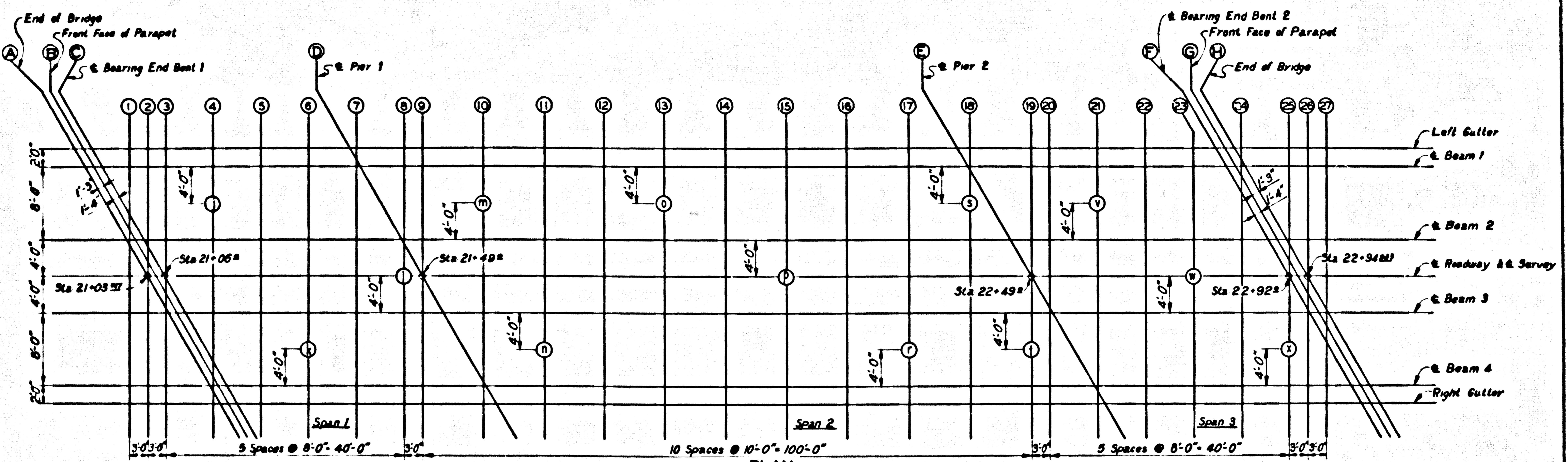
SUPERSTRUCTURE

KY 383 OVER RED RIVER SHEET 15
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT COUNTY OF
SIMPSON
TENNESSEE STATE LINE - FRANKLIN
ROAD P.E. PROJECT NO.
STATION 21+992 CONSTRUCTION PROJECT NO. 14593 MAINTENANCE PROJECT NO.

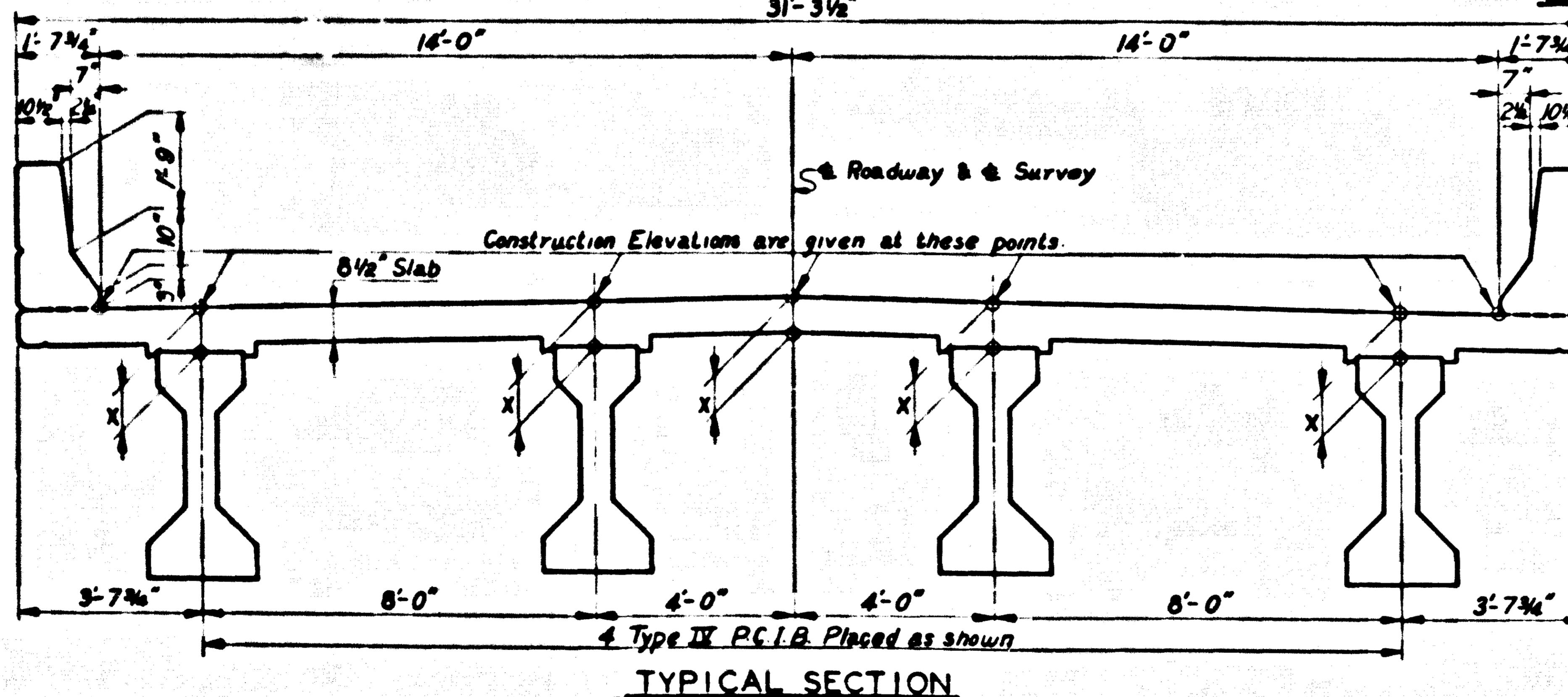
NEW BRIDGE

UPDATE DATE

LETTERS DATE



PLAN



TYPICAL SECTION

***CHECK POINT ELEVATIONS FOR SLAB THICKNESS**

POINT	TOP OF SLAB ELEVATION	BOTTOM OF SLAB ELEVATION	COMPUTED SLAB THICKNESS
J	596.989		
K	597.150		
L	597.441		
M	597.519		
N	597.624		
O	597.922		
P	598.252		
R	598.268		
S	598.266		
T	598.361		
V	598.450		
W	598.746		
X	598.766		

WORK THIS SHEET WITH SHEET 18

CONSTRUCTION ELEVATIONS

KY. 383 OVER RED RIVER SHEET 17

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS

FRANKFORT
COUNTY OF

SIMPSON

TENNESSEE STATE LINE-FRANKLIN

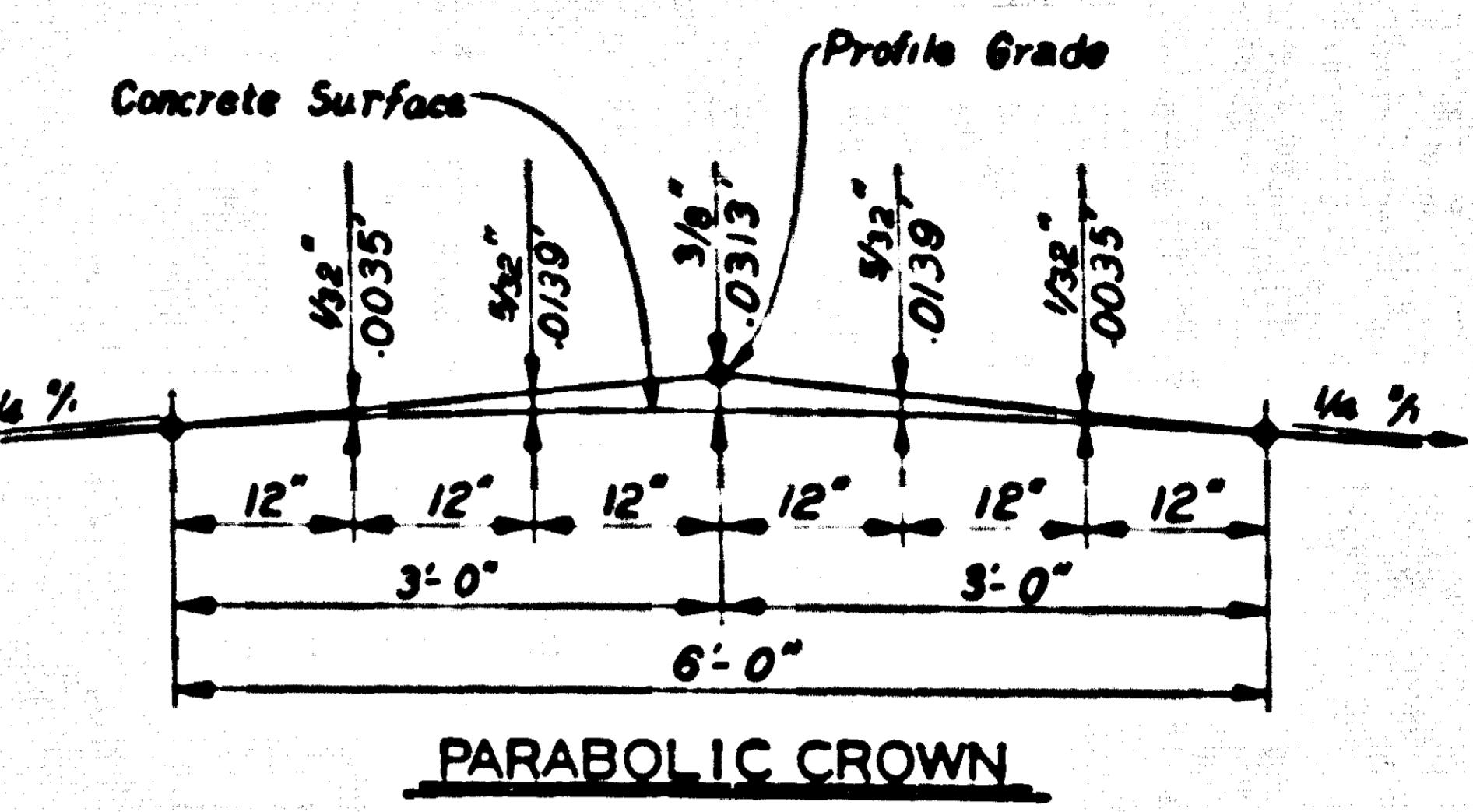
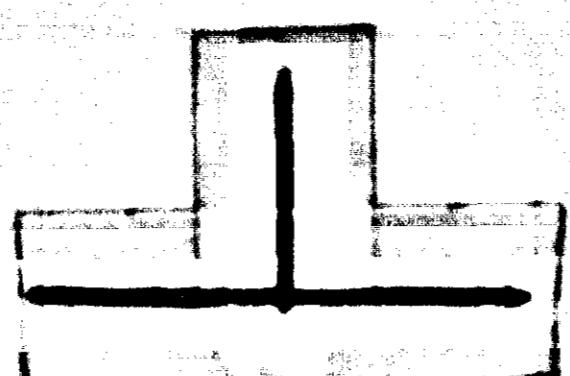
ROAD

STATION 21 + 99 P.E. PROJECT NO.

CONSTRUCTION PROJECT NO.	Maintenance Project No.	Contract No.
19599		

GRANITE RIDGE INN

LETTING DATE



LOCATION	LEFT GUTTER	GIRDER 1			GIRDER 2			GIRDER 3			GIRDER 4			RIGHT GUTTER	
		CONSTR. ELEV.	TOP OF BEAM	DIM. X	CONSTR. ELEV.	TOP OF BEAM	DIM. X	ELEV.	CONSTR. ELEV.	TOP OF BEAM	DIM. X	CONSTR. ELEV.	TOP OF BEAM	DIM. X	
SKW LN A TOP	598.688	598.721			598.934			597.009	598.980			598.880			598.830
SKW LN B TOP	598.693	598.730			598.948			597.023	598.995			598.874			598.844
SKW LN C TOP	598.698	598.751			598.964			597.039	597.010			598.890			598.860
SKW LN D TOP	597.128	597.181			597.364			597.469	597.440			597.320			597.290
SKW LN E TOP	598.128	598.181			598.364			598.469	598.440			598.320			598.290
SKW LN F TOP	598.558	598.611			598.824			598.909	598.870			598.750			598.720
SKW LN G TOP	598.573	598.627			598.830			598.914	598.885			598.765			598.735
SKW LN H TOP	598.598	598.641			598.854			598.929	598.900			598.780			598.740
GRID LN 1 TOP	598.720	598.780													
GRID LN 2 TOP	598.732	598.792													
GRID LN 3 TOP	598.783	598.824			598.988			597.039							
GRID LN 4 TOP	598.666	598.800			597.072			597.123	597.070			598.901			
GRID LN 5 TOP	598.946	598.987			597.154			597.208	597.153			598.984			598.943
GRID LN 6 TOP	597.024	597.066			597.234			597.286	597.234			597.067			597.026
GRID LN 7 TOP	597.101	597.142			597.311			597.364	597.313			597.147			597.106
GRID LN 8 TOP	597.210	597.244			597.367			597.441	597.390			597.225			597.184
GRID LN 9 TOP	597.258	597.292			597.431			597.480	597.418			597.254			597.213
GRID LN 10 TOP	597.414	597.446			597.590			597.629	597.564			597.360			597.321
GRID LN 11 TOP	597.548	597.595			597.742			597.783	597.720			597.528			597.480
GRID LN 12 TOP	597.666	597.726			597.861			597.925	597.865			597.678			597.632
GRID LN 13 TOP	597.801	597.841			598.004			598.052	597.995			597.816			597.772
GRID LN 14 TOP	597.895	597.936			598.108			598.161	598.100			597.938			597.885
GRID LN 15 TOP	597.972	598.016			598.198			598.252	598.204			598.041			598.001
GRID LN 16 TOP	598.032	598.078			598.265			598.325	598.281			598.126			598.088
GRID LN 17 TOP	598.090	598.128			598.320			598.383	598.342			598.195			598.158
GRID LN 18 TOP	598.121	598.160			598.364			598.428	598.390			598.249			598.214
GRID LN 19 TOP	598.213	598.254			598.418			598.480	598.431			598.292			598.258
GRID LN 20 TOP	598.244	598.285			598.450			598.501	598.447			598.304			598.270
GRID LN 21 TOP	598.326	598.367			598.533			598.584	598.551			598.362			598.321
GRID LN 22 TOP	598.406	598.447			598.614			598.666	598.614			598.446			598.404
GRID LN 23 TOP	598.483	598.524			598.693			598.746	598.694			598.527			598.486
GRID LN 24 TOP		598.601			598.770			598.823	598.772			598.606			598.566
GRID LN 25 TOP								598.899	598.848			598.684			598.643
GRID LN 26 TOP												598.712			598.672
GRID LN 27 TOP												598.740			598.700

WORK THIS SHEET WITH SHEET /7

CONSTRUCTION ELEVATIONS

KY. 383 OVER RED RIVER SHEET /8
COMMONWEALTH OF KENTUCKY
 BUREAU OF HIGHWAYS
 FRANKFORT
 COUNTY OF
SIMPSON
 TENNESSEE STATE LINE - FRANKLIN
 ROAD
 STATION 21+00 P.E. PROJECT NO. SP107-105-ZL
 CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO.
 1959

NEW BRIDGE